

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1640.—VOL. XXXVII.

LONDON, SATURDAY, JANUARY 26, 1867.

(WITH SUPPLEMENT) {STAMPEDSIXPENCE.
UNSTAMPED..FIVEPENCE.

Mining Exchange, London.

MINING EXCHANGE, LONDON.—As the rules of the Mining Exchange prohibit all its MEMBERS from ADVERTISING SHARES AT FIXED PRICES, the Committee feel it their duty to say that they have no means of offering redress to such of the public as may wish to purchase shares at fixed prices.

R. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 23 years.)

CROFTS having devoted his attention to the position of a large number of which have recently emerged from almost total forgetfulness into favour, refers to his remarks on p. 53, in this day's Journal, in reference to the fact that he has made of such mines, of which the following is a list, and can recommend purchases without delay:—

East Rosewarne.	East Rosewarne.
Prosper United.	East Rosewarne.
South Darren.	North Dolcoath.
Drake Walls.	Redmoor.
Bottle Hill.	East Lovell.
St. Agnes.	Great Retallack.

Persons of any of the above will suit their own convenience as to further cases, but the writer believes that a more valuable, though brief, list of shares, for either SPECULATION or INVESTMENT, has never yet been suggested to the mining public.

Bankers: National Bank of Scotland, Finch-lane.

WILLIAM LANE (SUCCESSOR TO JAMES LANE),
44, THREADNEEDLE STREET, LONDON, E.C. STOCK AND SHAREDEALER (Established Thirty Years), has FOR SALE the following

20 Bottle Hill, 5s. 6d.	15 East Grenville, £2 4s.	15 No. Crofty, £5 18s. 9d.
20 Calbeck Fells, 15s.	10 East Lovell, £10 3s.	10 North Phoenix, £1.
20 Crebor, 12s.	15 Great Caradon, 4s. 6d.	50 N. Treskerby, £2 17 6
20 Chiv. Moore, £6 6s 3d	15 Great Laxey, £17 1/2	50 Prince of Wales, 3s 6d
20 Carn Camborne, 2s 6d	20 Gt. Retallack, £2 1/2	50 Redmoor, 10s.
20 Chontales, £2 16s. 3d.	50 Gt. No. Laxey, 2s 6d	50 South Darren, 2s 8s.
20 Drake Walls, 27s.	15 Gt. No. Downs, £3 16 3	50 South Grenville, 7s.
20 East Carn Brea, £3 6 3	5 Great Wh. Vor, £18 1/2	50 West Wh. Killy, 7s 9d
20 E. Wh. Russell, £3 5 6	20 Marke Valley, £4 1/2	5 Wh. Treawny, £11 1/2
20 East Caradon, £6 2 6	50 Mineral Rights, 9s. 6d	20 Wheal Uny, £2 1/2
	1 Minera, £14s.	

West Chiverton, Drake Walls, Calbeck Fells, and Great Laxey. SPECIAL BUSINESS in the shares of these mines, either as BUYER or SELLER, for cash or fortnightly settlement.

Persons and parties in the country wishing to dispose of shares will find this advertisement a ready means of doing so, by forwarding me a list of their holdings. Approved references given to any part of the United Kingdom.

Bankers: London and County Bank.

M. R. LELEAN, ENGLISH AND FOREIGN STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, LONDON, E.C.

Bankers: Roberts, Lubbock, and Co., Lombard-street.

GUIDE TO INVESTORS.—MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for January contains the sixth of a series of articles on the whole circle of investments—British and Foreign Stocks and Bonds, Bank and Finance, Railway and Insurance, Gas and Water, and Manufacturing and Commercial Shares; with such information as is necessary to intending investors amidst the shoals and quicksands of the multifarious speculations of the day. Published by Pottle and Son, 14 and 15, Royal Exchange, London, E.C.

M. R. WILLIAM SEWARD, STOCK AND SHAREDEALER,
19, THROGMORTON STREET, LONDON, E.C.

MESSRS. WILSON, WARD, AND CO., STOCK AND SHAREDEALERS,

16, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Can recommend two good mines for investment.

M. R. THOMAS THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

THOMPSON'S official connection with Great Laxey having ceased, and as he constantly receives the most reliable information about the mine, he strongly advises his friends to consult him before operating.

Mr. THOMPSON strongly recommends the immediate purchase of Westminster.

GEORGE RICE, SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C. (25 years' experience), Member of the Mining Exchange, DEALS IN MINING SHARES at close market prices of the day, as BUYER or SELLER, for cash or account.

Closing prices.

East Gwlog, £20 - £22 1/2	Great Fortune, £4 1/2 - £5 1/2
Chiverton, 8 1/2 - 9 1/2	Great Retallack, 4 1/2 - 4 5/8
Chiverton Moor, 6 1/2 - 6 3/4	Marke Valley, 4 1/2 - 4 3/4
East Basset, 2 1/2 - 2 3/4	North Crofty, 2 1/2 - 2 3/4
East Chiverton, 1 1/2 - 2	North Treskerby, 2 1/2 - 2 3/4
East Carn Brea, 3 1/2 - 3 3/4	Prince of Wales, 3 1/2 - 3 3/4
East Lovell, 10 1/2 - 10 3/4	West Caradon, 11 1/2 - 12 1/2
East Russell, 3 1/2 - 3 3/4	Wheal Grenville, 20s. - 20s.
East Caradon, 5 1/2 - 6	Wheal Crober, 3 1/2 - 3 3/4
Great Vor, 17 1/2 - 18 1/2	West Chiverton, 64 - 66

Some of the above shares must still further rise, as stated in my previous advertisements, whereas others should be sold at once, to secure a certain profit before the fall takes place.

Jan. 20, 1867. Money advanced on mining shares.

Bankers: Bank of England.

CHONTALES AND ST. JOHN DEL REY GOLD MINES.—GEORGE RICE deals in these shares, as BUYER or SELLER, at close prices, and being in possession of important information as to the progress of the mines, can advise both speculators and shareholders when to buy or sell to their advantage.—Jan. 25, 1867.

CALDBECK FELS LEAD MINES.—GEORGE RICE strongly recommends a purchase in these great mines, before shares attain old price.—Jan. 25, 1867.

M. R. JAMES HUME, 74, OLD BROAD STREET,
TRANSACTS BUSINESS IN ALL DESCRIPTIONS OF MINE SHARES, net, at closest prices.

SPECIAL BUSINESS in East Russell, East Lovell, Great Retallack, Great South Toigues, Killy St. Agnes, Prince of Wales, Redmoor, East Carn Brea, Carn Cook's Kitchen, North Crofty, Bottle Hill, South Condurrow, Chontales, Pestarene Gold, &c.

Many shares recommended by Mr. HUME have had a very great advance, and there are several which Mr. HUME feels assured will yet rise 200 or 300 per cent.

Mr. T. HUME'S "Circular" forwarded on application.

Bankers: The London Joint Stock Bank.

WILLIAM MICHELL can advise the purchase of two or three mines that are more than likely to double in price in a very short time. EAST RUSSELL has advanced 50 per cent. in the past week on cutting the ore in the 140 ft. level. The north lode is the great object in view, which will be intersected in about a month, when shares may go to a very high price.

BURN Gwlog, at W. (Hawick).—The report and statement of accounts will appear in this week's Journal. The mine never looked so well as at the present moment.

CHONTALES.—"M. N." (Brighton).—The market for these shares is very illiquid at present, when the next gold arrives you may, in all probability, get a better price for your shares, but you will have another 10s. call to pay in the meantime.

ST. R.—K.—Had you been present you could have done no good, as everything was "cut and dried" before hand, and the secretary with his proxies could have out-voted you. A nice state of things for the management of any mine. What chance have you?

Money advanced on Mining Shares.

Apply to WILLIAM MICHELL, 42, Cornhill, London, E.C., Jan. 25, 1867.

M. R. GEORGE BUDGE, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 19 years), has BUSINESS in the FOLLOWING mining shares:—Don Pedro, Anglo-Brazilian, Pestarene, Minera, Wheal Killy (St. Agnes), Gawton, Maes-y-safn, Great North Downs, East Rosewarne, United Mexican, Great South Toigues, South Condurrow, Chiverton, Prosper United, Wheal Buller, Cnddra, New Crow Hill, Calbeck Fells, East Carn Brea, Mineral Rights, Wheal Uny, Quebrada, East Grenville, Redmoor, Prince of Wales, Drake Walls, East Basset, Hington Down, Darren.

See remarks on p. 53 of this day's Journal.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES."

of yesterday (Friday), Jan. 25, No. 408, Vol. IX., price 6d. each copy, forwarded on application, contains a leading article on the Share Markets, and full particulars respecting the following mines:—

North Wheal Crofty.	Prince of Wales.	East Wheal Lovell.
Drake Walls.	Tincroft.	East Pool.
Prosper United.	Carn Brea.	Frank Mills.
West Caradon.	St. Ives Consols.	Bryn Gwlog.
Wheal Seton.	Great Wheal Vor.	West Chiverton.
Marke Valley.	Great East Lovell.	Cook's Kitchen.
South Wheal Frances.	East Wheal Russell.	West Wheal Frances.
Providence.	Wheal Chiverton.	Devon Great Consols.
South Caradon.	Wheal Grenville.	Great South Toigues.
Great Retallack.	Redmoor.	

And particulars as to the valuation of copper, tin, and lead lodes.

PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—MR. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD STREET, LONDON, E.C.

Railway, Joint-Stock Banks, Dock, Insurance, Canal, Mining, Steam-ship, &c., and every other description of shares bought and sold at net prices.

TELEGRAPHIC MESSAGES to BUY or SELL Railway, Bank, Mine, and other shares and stocks, punctually attended to, at net prices for cash, or for fortnightly settlements, with advice as to purchases or sales.

Twenty-two years' experience.

Bankers: The Alliance Bank, and the Union Bank of London.

From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality, and to the best advantage of his clients.

M. R. EDWARD COOKE, STOCK AND SHAREDEALER,
76, OLD BROAD STREET, LONDON, E.C.

Has SPECIAL BUSINESS in Chontales, Prince of Wales, East Lovell, Frank Mills, South Darren, West Caradon, Prosper United, and North Crofty.

Stock Exchange securities dealt in at close market prices.

Satisfactory references given in any town in the United Kingdom.

Bankers: Alliance Bank.

M. R. C. A. POWELL, SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C. (Member of the Mining Exchange).

Purchases or sales effected at net prices, for prompt cash or account. Clients treated with in all cases at a fair margin on the market price.

Mr. C. A. POWELL is prepared to BUY or SELL shares in any mines currently dealt in, and devotes especial attention to those prominently before the public.

Daily Price List on application.

Bankers: Bank of England.

M. R. JOHN LITTLE, STOCK AND SHAREDEALER,
77, OLD BROAD STREET, LONDON, E.C. (late of Redruth).

Immediate attention to orders by telegraph or letter.

Prompt cash settlements.

M. R. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C.

JOHN RISLEY, 32, LOMBARD STREET, and MINING EXCHANGE, LONDON, E.C., has SPECIAL BUSINESS in East Gwlog, Wheal Buller, and West Caradon shares.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREDEALERS,
CUSHION COURT, OLD BROAD STREET, CITY, E.C.

Closing Prices, Friday Evening, January 25.

Buyers.	Sellers.	Buyers.	Sellers.
Carn Brea, £17 1/2 - £18 1/2	Great Retallack, £2 1/2 - £2 3/4	4 W. Chiverton, £54 1/2	25 G. So. Toigues, 18s. 9d
Chiverton, 9 - 9 1/2	Prince of Wales, 3s 6d - 3s 6 1/2	4 W. Chiverton, £54 1/2	25 G. So. Toigues, 18s. 9d
Chiverton Moor, 6 - 6 1/2	Great Vor, 17 - 18	25 G. So. Toigues, 18s. 9d	25 G. So. Toigues, 18s. 9d
Clifford, 2 1/2 - 2 3/4	North Crofty, 2 1/2 - 2 3/4	25 G. So. Toigues, 18s. 9d	25 G. So. Toigues, 18s. 9d
Drake Walls, 2 1/2 - 2 3/4	South Condurrow, 3 1/2 - 3 3/4	25 G. So. Toigues, 18s. 9d	25 G. So. Toigues, 18s. 9d
East Basset, 2 1/2 - 2 3/4	Prosper United, 3 1/2 - 3 3/4	25 G. So. Toigues, 18s. 9d	25 G. So. Toigues, 18s. 9d
East Caradon, 5 1/2 - 6 1/2	West Chiverton, 63 - 65	25 G. So. Toigues, 18s. 9d	25 G. So. Toigues, 18s. 9d
East Lovell, 10 1/2 - 11	Wheal Buller, 23 - 25	25 G. So. Toigues, 18s. 9d	25 G. So. Toigues, 18s. 9d
East Russell, 3 - 3 1/2	Great South Toigues, 17s - 18s	25 G. So. Toigues, 18s. 9d	25 G. So. Toigues, 18s. 9d

Messrs. WARD and JACKMAN refer their friends to their remarks on p. 53 of this day's Journal.

Bankers: London and Westminster, Lothbury.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALS IN ALL KINDS of bona fide STOCKS and SHARES, at close market prices.

Bankers: Alliance Bank.

MATTHEW GREENE, STOCK AND SHAREDEALER,
ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.

Bankers: Imperial Bank.

M. R. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 12 years), has FOR SALE the FOLLOWING SHARES, at net prices:—

50 Prince of Wales, 3s 6d	50 G. Retallack, 4s 6d	70 Frontino, 5s. 3d.
40 Calbeck Fells, 14s 9d	50 Chiverton, £2 1/2	50 Chontales, £2 12s.
20 North Crofty, £2 1/2	10 West Caradon, £12 1/2	4 W. Chiverton, £54 1/2
15 Chiverton, £8 18s. 9d.	40 Drake Walls, 27s. 9d.	25 G. So. Toigues, 18s. 9d
10 East Lovell, £10 8s 9d	50 Prosper United, £3 13 9	25 G. So. Toigues, 18s. 9d
25 Wheal Agar, 27s. 6d.	30 S. Condurrow, 16s. 9d	50 Mineral Rights, 9s 6d
15 East Russell, £3 6s 3d	50 No. Dolcoath, 4s. 6d.	1 Wheal Seton, £12 1/2
35 Grenville, 22s. 9d.	30 Lady Bertha, 1s. 9d.	10 Marke Valley, £4 1/2
10 East Caradon, £5 1/2	40 Wheal Uny, £2 13s 9d	50 Crebor, 10s. 9d.
1 Wheal Basset, £7 3/4	10 Tincroft, £14 1/2	15 Chiverton Moor, £6 7s
St. Ives, £2 1/2	30 Frank Mills, 37s. 6d.	5 Cook's Kitchen, £11 1/2
5 Treawny, £11 11s 2d	35 Carn Camborne, 24s 9d	6 Gt. Wh. Vor, £18 3 9
25 E. Rosewarne, 21s.	25 Rosewarne Unl., 10s 9d	4 Wheal Buller, £25 1/2
4 Providence, £22 1/2	20 No. Treskerby, £2 17s	40 East Grenville, £17 1/2
3 East Basset, £25 1/2	4 South Frances, £19 1/2	4 Carn Brea, £18 1/2
25 Gt. No. Laxey, 26s 9d	10 Great Laxey, £17 1/2	5 Wheal Rose, £29 1/2

MR. EDWARD BREWIS recommends the immediate purchase of East Wheal Seton shares, at present prices of 1/4 to 1/2, and South Condurrow, at 3/4 to 7/8, both of which will advance considerably.

No. 8, Warrford-court, Bank, London, E.C.

M. R. G. D. SANDY, STOCK AND SHAREDEALER,
No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS IN EVERY DESCRIPTION OF STOCK EXCHANGE SECURITIES, MINING AND FINANCIAL ENTERPRISES, at close market prices.

Mr. G. D. SANDY recommends the immediate purchase of New Tamar, and Lovell Consols, as a rapid advance in price is certain to take place early this year.

Mr. G. D. SANDY'S Circular for the present month, is now ready, and should be perused by all interested in mining enterprise. Gratis, post free.

Correct Daily Price List may be had on application.

Money advanced to any amount on legitimate stocks and shares.

References exchanged.

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 2, BUCKLESBURY, LONDON, E.C.

Business transacted in every description of stocks and shares at lowest market prices, free of commission.

All communications will receive immediate attention, either personally or by letter.

N.B.—LOVELL CONSOLS: Intending investors should not delay purchasing at present low prices, £3 to £3 1/2. The manager reports "that the lode in the 12 end is looking well, and from appearances anticipates having a great improvement very shortly."

WEST MARIA AND FORTESCUE.—An OFFER WANTED for 25 shares.

Bankers: London and Westminster.

M. R. EMERSON, 28, GREAT WINCHESTER STREET, LONDON, E.C., has the FOLLOWING SHARES FOR SALE at net prices:—25 North Dolcoath, 7s.; 20 Drake Walls, 27s. 6d.; 50 East Bottle Hill, 2s.; 50 Gwilyr Park, 2s.; 60 Pendern, 2s.; 20 Great South Toigues, 2s.; 50 Wheal Crober, 14s.; 10 Leeds and St. Aubyn, £3; 50 Sordridge Consols, 3s.; 5 Great Laxey, £17 1/2; 5 Westminster Lead, £5; 100 Abraham Consols, 10s.; 5 South Callington, £2.

And a BUYER of North Basset, West St. Ives, West Basset, and Dale.

Advice given on the sale and purchase of shares.

Eighteen years' experience in Cornwall and thirteen in London.

M. R. CHARLES THOMAS, MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER,
3, GREAT ST. HELEN'S, LONDON, E.C.

M. R. CHARLES THOMAS WILL SELL, at the London Tavern, Bishopsgate-street, on Thursday, the 7th of February next, at One o'clock precisely, the FOLLOWING, with other shares:—

310 West Killy.	20 Bottle Hill.	10 East Seton.
20 Central Minera.	100 West Beam.	Wheal Mary Ann.
50 Great So. Chiverton.	40 Bagtor.	Rosewarne Consols.
50 Maudlin.	15 East Russell.	Central Snailbeach.
19 North Pool.	150 Crebor.	

Persons desirous of offering shares at this sale must give notice of same on or before Saturday, 24 February.

Persons desirous of purchasing any of the above shares previously to the day of sale can, in most instances, do so on application to the auctioneer, with positive offer.

Particulars and conditions of sale may be had at the offices of the auctioneer, No. 3, Great St. Helen's, London, E.C.; and at the MINING JOURNAL office, 26, Fleet-street, London, E.C.

NORTH POOL MINE.—MR. CHARLES THOMAS has a NUMBER OF SHARES FOR SALE, for which no reasonable offer will be refused.—3, Great St. Helen's, London, E.C.

M. R. T. E. W. THOMAS, MINING AGENT AND GENERAL SHAREDEALER, UNION CHAMBERS, UNION COURT, OLD BROAD STREET, LONDON, E.C.

Mr. THOMAS has SPECIAL BUSINESS in Bottle Hill and East Bottle Hill, West Killy, North Wheal Crofty, and North Roskear.

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE, LONDON, E.C. (Members of the Mining Exchange), STOCK AND SHAREDEALERS, AND FINANCIAL AGENTS, transact business in all kinds of securities at closest net prices for cash or account.

Parties of respectability can have transfers registered in their names previous to payment.

Daily price list on application.

Bankers: London and County Bank.

SAFE INVESTMENTS FOR CAPITAL,
Paying 5 to 20 per cent. per annum upon the outlay.

SHAREHOLDERS, CAPITALISTS, TRUSTEES, AND INVESTORS seeking valuable and reliable information, and requiring safe, sound, and profitable investments, should at all times consult

SHARP'S GENERAL INVESTMENT CIRCULAR

(Post free).

It is a safe guide, giving every information to shareholders and capitalists.

GRANVILLE SHARP, STOCK & SHAREDEALER, 32, POULTRY, LONDON, E.C.

NANGILES AND EAST CHIVERTON MINES.—WANTED TO PURCHASE A FEW SHARES in these two mines. Sellers will please state number and lowest price for cash to GRANVILLE SHARP, No. 32, Poultry, London, E.C.

M. R. JOHN B. REYNOLDS, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.

Mr. REYNOLDS never collects a period so promising as the present for a quick rise in the price of good bona fide mining undertakings. His first Circular for 1867, now in course of preparation, will contain some startling facts relative to the past, present, and future prospects of this branch of industry.

Established Ten Years. Member of the Mining Exchange.

Bankers: City Bank.

M. R. JOHN B. REYNOLDS, OFFICES, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.

Business transacted in British and Foreign Stocks, Railway, Bank, Insurance, Financial, or Mining Companies Shares, and all Miscellaneous Securities, at the lowest market quotations.

Exchanges effected and purchases found for shares not generally marketable. Mr. REYNOLDS is a BUYER of any number of West Wheal Killy shares. Sellers please state number and lowest price.

Telegrams promptly attended to. Established Ten Years.

Bankers: City Bank.

M. R. WILLIAM WARD, STOCK AND SHAREDEALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C.

JAMES D. GINN AND CO., STOCK AND SHAREDEALERS,
3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MESSRS. MCNEILL AND LONG, STOCK, SHARE, AND MINING DEALERS,
31, THREADNEEDLE STREET, LONDON, E.C.

M. R. T. ROSEWARNE, 81, OLD BROAD STREET.

WANTED TO BUY, SHARES in the FOLLOWING MINES:—Bedford United, Drake Walls, Great South Toigues, North Roskear, Stray Park, Calbeck Fells, North Crofty, Prince of Wales, West Caradon, East Russell, Okel Tor, Devon Consols, Wheal Seton, Chontales, Chiverton Moor, East Lovell, East Rosewarne, East Grenville, East Caradon, North Treskerby, Wheal Buller, Wheal Uny, East Carn Brea, Great Retallack, Great Vor, Marke Valley, Prosper United, West Chiverton, East Carn Brea, Great North Downs, Wheal Rose, Gawton, Tincroft, Wheal Edward, Princess of Wales.

An OFFER WANTED for Lady Bertha, Old Gunnislake, Dale, Gwydr Park, Pendern, and St. Day United.

Parties desirous of investing in mining should consult T. ROSEWARNE, as a great deal of money is to be made in several of the above mines.

Original Correspondence.

THE OAKS COLLIERY EXPLOSION—THE FIRE-DAMP INDICATOR.

SIR,—Mr. Brown, in a letter to the *Times* of Jan. 9, says—"The public ought to know if Lord Kinnaird was warranted by Mr. Ansell's report to him in stating what he has done as to the Oaks Pit;" I, therefore, send you an extract from Mr. Ansell's report to me for publication:—

"On the day of publicly testing my instruments I could not find gas with them, nor could the engineers with their lamps, till we went into the goaf; and he, therefore, on that day, considered the Oaks Colliery was perfectly ventilated. The second day's visit was private. "I was invited by Mr. Dymond to meet him, and go with him and Mr. Tewart to test the Aneroid indicator, as he wished to try it in the return air in the pit. In the pit on the second day Mr. Dymond, Mr. Tewart, and I looked for gas in the return air at the bottom of the Cupola shaft, and I found 5 per cent. (five per cent.) of fire-damp in the return air. We then placed a trestle, and stood the Aneroid on that, and three times it gave the same result; and Mr. Dymond expressed himself perfectly satisfied of the fact as determined by the Aneroid indicator, although neither he nor Mr. Tewart could detect gas in their Stephenson's lamps.

"At my urgent request, Mr. Dymond, at inconvenience to himself, took me (Mr. Tewart going too) to the gas-works, as I called them—that is, to the gas-holder. When arrived there I was surprised, and so I believe was Mr. Dymond, to find that as much, and probably more, gas was escaping from a hole in the floor, some feet from the gas-holder, than was passing into the gas-holder. There was a good current of air passing, and Mr. Dymond sat on the intake side. I sat on the gas-holder, and Mr. Tewart, after some conversation in regard to the leaks with Mr. Dymond, went to examine them. After his examination we tested the indicator. Mr. Dymond held it about four feet from the ground, and found seventeen and a-half (17½) per cent. of gas. Our heads were in this atmosphere as we sat, and above our heads Mr. Dymond found twenty-two (22) per cent. of gas. He tried with his lamp, and was satisfied. Mr. Dymond gave directions to Mr. Tewart to remedy the leak, and advised our getting out of the place, which we did, having remained there about 20 minutes. While we were in the pit, about a mile from the upcast shaft, a fall of coal released a large amount of gas, and the men ran away. As soon as I heard what had happened I sought and obtained from Mr. Dymond permission to go down and experiment at the place where this escape was going on. It was about 800 yards down an incline, and when nearing the place the gas literally roared out, so that we proceeded cautiously, and, when I got to the first blower, tested for the gas. There was only 3 per cent. of gas in that which was issuing. The underwriter laughed at me when I said so; but when, by my persuasion and declaration that there was no danger, he tested it with his lamp, he corroborated my statement, for his lamp gave no evidence. When I reached the main blower I, by lying down, reached my barometer indicator into the hole from which the gas issued. I found still only 3 per cent. of gas, and the whole atmosphere showed the same. This I consider an important case, for had the men had the means they could have tested the amount of danger, instead of bolting as they did."

Mr. Brown may hold that leaks (not sudden outbursts from the fall of coal) do not show a deficiency of ventilation; but he will hardly, I think, deny that 5 per cent., or two-thirds of 7½ per cent., which is the amount of gas required to make an explosive mixture, is sufficient to justify my statement, particularly as the ventilation is so much affected by the state of the external atmosphere, and it can scarcely be denied that the evidence at the inquest fully confirms all I have stated. Mr. Brown further states:—

"I am not going into the merits of the ventilation there now, but am only directing attention to the discrepancy, real or apparent, between Mr. Ansell's statements to Lord Kinnaird and to myself."

I hardly think it fair for Mr. Brown to have published what passed in a private conversation at his house, and to have suppressed a most important part, which was to this effect:—

"Mr. A.: Has that great leak at the gas-holder been stopped?"—Mr. B.: "Did you know that?"—Mr. A.: "Yes; I went there with Mr. Dymond and Mr. Tewart, but I do not wish to speak of it, as it would be damaging to Mr. Dymond if mentioned, and it had not been set right?"

Rossie Priory, Jan. 18.

KINNAIRD.

THE OAKS COLLIERY.

SIR,—In the *Mining Journal* of Saturday last, in alluding to the catastrophe at the Oaks and Talke Collieries, a correspondent states, with regard to the former, that the evidence goes to show that it was a very fiery colliery, and that the explosion could not have taken place had it been properly ventilated. Knowing something of the colliery alluded to, and having been down it very recently, allow me to say that it has always been considered one of the best ventilated collieries in the district, no less than 160,000 cubic feet of air passing through it every minute. Such, also, was the opinion of Mr. Ansell, who visited it in August last, and who offered to give evidence before the coroner to that effect, if required. Not being connected with any colliery whatever, as an act of justice I think it only proper to set your correspondent right, as I am aware his views are largely shared in by the public, who have had no means of obtaining reliable information as to the state of the Oaks Colliery.

Barnsley, Jan. 23.

J. R.

COLLIERY ACCIDENT COMPENSATION FUND.

SIR,—The idea of establishing a fund for the relief of sufferers by colliery accidents has on many previous occasions been mooted in the *Mining Journal*—indeed, the suggestion has followed almost every great calamity; yet hitherto the question has not been energetically taken up by the employers, and the consequence has been that the suggestion has gradually been lost sight of, only to be renewed after the next great accident. This apathy on the employers' part has, no doubt, resulted from no one feeling inclined to come forward on his individual responsibility and advocate the levying of an additional tax upon the community to which he belongs; but happily there has now been found a gentleman who, understanding the evils of false delicacy in the matter, has come boldly forward to promote the good of both employers and workmen: this gentleman is Mr. W. R. Innes Hopkins, the Chairman of the Middlesbrough Ironmasters' Association, and if he will only persevere to secure the aid of the employers, he may reckon on the fullest co-operation of the workmen. Of course, a delegate cannot guarantee what the decision of the National Association of Miners, as a body, will be; but I know quite enough of the council to answer for it that they will fall in with any arrangement which is practicable and equitable—they do not wish to be under any obligation to the employers, but, on the other hand, will not let the employers secure themselves against the loss attendant upon colliery accidents at the expense of the workmen. To take the gist of Mr. Hopkins's letter, I find that he mentions the suggestion that the owners of each pit should be rated at a certain amount, to be paid into a common fund, based upon the annual average for the last five years of accidents in coal mines throughout each portion of the United Kingdom, and that out of this fund allowances should be made to the widows and orphans of those who are killed by the unavoidable accidents of their calling; and then gives his attention to the mode of raising the fund, and upon this point he remarks—"Assuming that it would be equitable to divide the expense of the Compensation Fund equally between the coal owners and the workmen, it is evident that a contribution of one-sixteenth of a penny per ton of coal raised, and of one-half penny per week per collier, would raise an annual sum of above 55,000*l.*, or allowing for contingencies, expense of collecting, &c., say of 55,000*l.* a year, which would be sufficient to allow a more liberal provision for survivors than was adopted even in the Hartley case."

Now, I do not myself consider that this is such an arrangement as the workmen could adopt. They are not paupers; and would not, therefore, contribute on any other terms than the employers, nor would they contribute unless they have the same power as the employers in the distribution of the funds. Under these circumstances, I think the following scheme would be acceptable to both parties, and if it be brought before the Mining Association of Great Britain at their meeting it will, I am sure, be discussed with equal fairness at the next delegate conference of the workmen:—First, we must have the data, which are contained in the following statements:—"In the ten years ending 1860, 9090 lives of miners were lost in collieries. During these ten years 605,154,940 tons of coal were raised, so that one person was killed for each 66,573 tons of coal raised from the pits; 909 were killed annually, according to the average." Then, as to the number employed—"There are in the United Kingdom 3268 collieries, in which are employed 307,542 coal miners, who produced by their labour, in 1865, 98,150,587 tons of coal, which is valued at the pit's mouth at 21,537,646*l.*" Thirdly, we have the fact that by the Oaks explosion (where from the large number killed the figures will nearly represent the average) the death of 359 colliers left 214 women (153 of them widows) and 355 children unprovided for, which would show that from the 909 deaths we might expect

556 women (397 of them widows) and 925 children annually thrown upon the funds. These data will suffice for present purposes, and as all the variable figures relate to the same year, the calculations will be quite as correct as if we had the figures for 1866 before us.

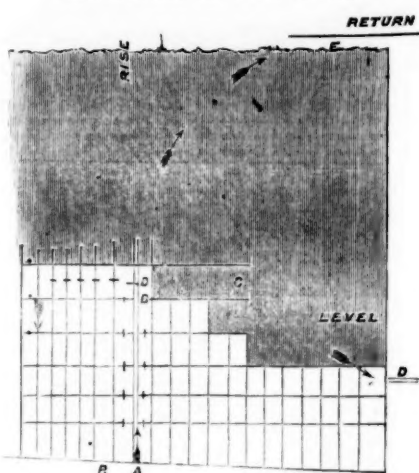
To relieve these survivors, as the National Miners' Association considers they should be relieved, would require (say) 50*l.* for each child and unmarried woman, and 100*l.* for each widow, or (say) 94,000*l.* (93,900*l.*) per annum; and the question is how is this sum (which must be entirely distinct from all others) to be raised? To levy the sum at per colliery would be obviously unfair, and to levy it at per collier would be equally so, and hence we come to a levy on tonnage—94,000*l.* must be raised on 60,500,000 tons of coal, and 60,500,000 halfpence would be 126,041*l.* 13*s.* 4*d.*, which would cover the amount, and leave a good margin.

Now, if the Mining Association of Great Britain will co-operate with the National Miners' Association to obtain a short Act of Parliament to make it binding on both employers and workmen to contribute one farthing per ton, I am sure that both the individual employers and the individual workmen would regard it as a boon. As to the collection, management, and distribution of the fund, it would be simple enough. Let each pay-clerk deduct the farthing per ton from the wages each pay-day, and pay it within 12 hours with the employers' farthing per ton into the nearest Post-office Savings' Bank obtaining a duplicate receipt, one to be sent to the Government Inspector and the other to be hung up beside the special rules of the colliery until the next pay-day. The management should be in the hands of a committee formed of an equal number (chosen from the council of each association) of employers and of workmen, a quorum of such committee having the sole power to withdraw money from the bank and distribute the funds. In the event of the surplus exceeding that which the committee consider necessary, it could be conveniently reduced by *Gazetting* a notice that the levy would be suspended for a given number of weeks. As a means of bringing the councils of the two associations into communication upon this all-important question, and to avoid all personal jealousies in the matter, I have to request you, should you consider the suggestions worthy of discussion in your columns, to forward copies to Mr. Wm. Mathews, the President of the Mining Association of Great Britain (previous to the meeting on Thursday), and to the President of the National Miners' Association, Mr. Alexander McDonald, with the notification that it will be published in the *Mining Journal* on Saturday.

Jan. 21.

A DELEGATE.

VENTILATION OF COAL MINES.



SIR,—The figure No. 1 delineates a goaf, and pillar working adjoining it, the extent of the goaf being 40 acres; the northern part of this goaf has been formed several years, the remaining part having been formed more recently. The air enters the district at A, proceeding up the wagon-way borders to the point B, and then to the right to the edge of the goaf at C. It then proceeds to the rise, and coursing along the edge of the goaf, returns down parallel to the wagon-way, where it passes into the main return through a regulator at R. The arrows show the course of this current, and also the current which passes through the goaf to the right. As I remarked above, this part of the goaf is very old, yet the air passes freely through it. A small hole, 1 foot in area, at D, through a stopping, admits this current to the return; and here it must be observed that this current is always pure, or nearly so, not being at all mixed with gas of any kind. The arrows also show that a current passes from C to the extreme rise at E, where a passage rather larger than that at D, is provided, and at this part gas is often met with, particularly when the barometer sinks rapidly. At the point C, and along the edge of the pillars where the men work gas is never met with, this being a great advantage in every way. The effect of closing the outlets at D and E, as might be expected, to allow the goaf to become charged with gas and choke-damp, which then appears in the working places at and near to the edge of the goaf.

I will only further remark, that it appears to be supposed by many that in following this plan a more powerful ventilation is required than by the ordinary method, owing to the resistance met with in the forcing of the air through the goaf, but I think that experience shows the contrary to be the fact, and a given quantity of air applied in this way is more effective than in any other way, as if the goaf is allowed to become charged with gas, a much larger quantity of air is required to sweep the edge of it, so as to render the workings accessible and safe.—*Newcastle*, Jan. 23.

M. E.

MECHANICAL AND FURNACE VENTILATION.

SIR,—The recent colliery explosions have led many to suggest the abandonment of furnace ventilation altogether in collieries, and the substitution of mechanical ventilation for it; and, as from time to time a large number of ventilating machines have been invented, it will not, I think, be uninteresting to refer to a few of them, and comment upon the principal merits and defects of each; but, at the same time, I must remark that in my opinion for deep pits furnace ventilation is not only more economic, but considerably more safe than any mechanical ventilator which has yet been invented, even assuming the most ordinary form of furnace to be used, but I believe Mr. Wales's furnaces approach so nearly to perfection that but little more need be desired. The furnaces to which I allude were erected by the late John Wales at Hetton, and by their use not only can any part of the furnace be repaired at pleasure, but the quantity of air passed through the pit can be regulated as required. The steam jet produces somewhat the same effect as the furnace, but much less efficiently and much more expensively, so that the real comparison will be between the furnace and the machine ventilator.

The mechanical ventilators are of two distinct kinds—those on the air-pump principle and those on the fan principle, both of which are considerably more ancient than the furnace. The best forms of air-pump ventilators are those of Struvé and Nixon, the former being a kind of modified gasometer, rising and falling within a cylinder, and, therefore (as the packing is water only), almost free from friction. But the Nixon's ventilator, in use at the Navigation Pit, Aberdeen, is, probably, the most powerful mechanical ventilator yet erected; it is practically an enormous horizontal cylinder, with a small railway within it to carry the piston, which is supported on wheels. There are 168 inlet and the same number of outlet valves on each side of the piston, and the quantity of air extracted is really enormous.

To turn to the fan ventilators, the principal are those of Guibal and Lemielle, which have been tried and approved, and that of Mr. Doull, of Westminster, described in the *Mining Journal* of Dec. 29, and stated to combine all the advantages of those already named. Guibal's is an ordinary centrifugal fan, but is cased in a peculiar manner, which prevents the great loss of air which usually results from driving a fan at a high speed; but even the best fans do not

utilise more than one-half of the power employed. Lemielle's tilator forces out the air by means of a series of flapping doors, which are connected with the tie-rods to the centre of the cylinder, so that as the eccentric revolves the distance between the ends of the eccentric and the outer end of the doors continually varies. Doull's fan the complications of the flapping doors are avoided, providing a slot in the casing and fastening the other end of the door to the eccentric; but in both cases the air is swept out in the same manner, and it is said with less loss of power than with Guibal's.

The great objection, however, to all fans is that there is only given speed at which they will give out their full power, and as speed seems to vary almost daily, according to the state of the mine, a speed that suits one day will not suit the next. Mechanical ventilators are all well enough for new work, but for deep pits there is nothing equal, either for safety or efficiency to a well-constructed furnace, which is the only ventilator to be permanently relied on. The remarks of Professor Warrington Smyth, the Royal School of Mines, in his "Coal and Coal Mining," just published, are most apposite—"In selecting our ventilating power must be remembered that the great object is to obtain a large volume of air at moderate velocity, and that on this account most of simple fans, and certain other classes of machines, which have force the air through insufficient valve-room, give it an unnecessary velocity, which, in other words, means increased resistance and diminished ventilation"—and I fear that the same objection applies with equal force to every mechanical ventilator yet constructed.

Jan. 23.

F. T.

COLLIERY ACCIDENTS—SUB-INSPECTORS.

SIR,—The late terrible accidents in collieries tend to prove an axiom I had formed some years past when residing in Glamorganshire, which was the necessity of closer inspection on the part of the Government. I have been told, and from good authority, that if Government Inspector of Glamorganshire went down one pit, one level, every day he could not visit each working once in 12 months. Now, if this is the case, why not have sub-inspectors—men of practical knowledge, whose duty it should be to make fortnightly visits to each colliery, and report the system and state of works to the superior? The additional expense might be met by a fraction charge on the coal raised, which would scarcely be felt by the consumer.—*Jan. 22.*

BORING AND BLASTING EXPERIMENTS IN AMERICA.
DR. EHRLHARDT'S NEW BLASTING POWDER.

SIR,—The HOOSAC TUNNEL, which is being constructed for the purpose of obtaining a more direct route between the Western State and the State of Massachusetts, was commenced about 12 years ago, but has been vigorously worked at only for the last three years, since the authorities have taken it into their own hands. For the information of your readers I shall give a short description of this enormous work, which is certainly one of the grandest undertakings of the age. I shall visit every part of the work in its turn, I shall commence with the farthest or the east end, a distance of nine miles over the mountains from the west end of the tunnel; and a long, tedious, and frightful cold ride it is in the winter, with the thermometer from 10° below zero, although on a warm and sunny day the magnificent scenery well repays for the long ride. Starting from the village of North Adams, nestled quietly in the little valley formed by the lock in the south, Hoosac in the east, and by a chain of hills north and west, except where the Hoosac river forces itself to the western range, your horse creeps up the western side of the mountain, 2510 ft. above high water, by a circuitous roadway, accomplishes the distance at last only by interminable winding zigzags, reminding one of the parallels used in approaching a fortified mountain, you descend into a valley, and for two miles fancy yourself again on *terra firma*, and not an inhabitant of the clouds; but you have still to pass the eastern summit, 2210 ft. high water, before you descend the eastern slope and reach the

East End of the Tunnel,—where the work is prosecuted with greatest vigour. Here, on the banks of the Deerfield river, a village has sprung up since the commencement of the work, a machine shop for the manufacture and repairs of the tools, and numerous houses for the workpeople have been erected amidst a scene as wild and picturesque a country as can be found in the world over. Before entering the tunnel I had, perhaps, better give an idea of its proposed dimensions, cost, &c., which will aid the reader in more clearly determining as we proceed the amount of work and the amount still remaining to complete this gigantic enterprise. Its whole length is in round numbers 25,000 ft., or about 4½ miles; its cost thus far is about \$2,000,000, and it is estimated that \$3,000,000 more will be required to finish the work. The expense now gained, and the improvements made in machinery for the purpose of which in the earlier stage of the work was necessary, experimental, and a more powerful blasting powder will enable State Commissioners to carry forward the work with greater rapidity and at less expense than formerly; about 18,000 feet of tunnel still remains to be completed between the eastern and western ends. The eastern part is the most interesting portion; here the amount of work has been done; the heading is now 3500 ft. from the mouth of the tunnel, the roadway for part of the distance graded, and temporary tracks (rails) for the removal of the debris laid down the first 1000 feet the water percolates through the rock, but the tunnel is perfectly dry, so that water has to be carried to the heading, where it is used to cool the drills.

The formation of the mountain throughout this part, and at every part, is mica slate—a very hard and tenacious rock occasionally mixed with a little quartz, but has varied very much from the mouth to the heading. This rock geologists designate as the surface of the mountain to thousands of feet of the Connecticut river; we may, therefore, safely assume that the Hoosac has got a sound understanding, and that there is no danger of the tunnel falling through. The bore for nearly its entire length has a section of 17 ft. wide, and from 20 ft. to 7 ft. in height, heading always being kept in advance for about 500 ft. It is signed to be, when complete, 26 ft. wide and 24 ft. high. Gas has been introduced to light the tunnel, a great improvement on tallow candles or fire-flies, and much safer. At the heading it is very interesting, the scene almost infernal; the glare of the roar and clatter of machinery, the rushing of compressed air through the pipes, for the purpose of ventilating the passage, supplying workmen with the breath of life, and driving the machinery, shall mention by-and-by) certainly has a diabolical look. Mounted upon a "carriage," the drills are at work, from four in number, each one eating into the bowels of the mountain, keeping up a horrible noise and racket. The drills have in the past been one of the greatest drawbacks in the progress of the tunnel, and to a recent date had been found strong enough to stand severe test to which this rock subjects them; but a Mr. Burke Fitchburg, has recently invented a drill, which has thus far given the utmost satisfaction. One of his drills recently bored a hole of 27½ inches within six hours, making 11 holes at an average distance of about 25 inches from each other, and another drills worked an entire week without stopping for repairs must be acknowledged a remarkable feat for a bore. The work upon which these drills are placed will accommodate 12 at a time, till lately, owing to their constantly breaking down, not more than four could be kept running; 110 men are employed at this time, and the progress made is at the rate of 50 ft. per day. Dr. Ehrhardt, whose powder has been often alluded to in the *Journal*, has been trying experiments in blasting at this end of the work, and the result is that with one-half the quantity of powder he effects one-third more work at the same time with the full quantity of the blasting-powder, and it is said that with holes of larger dimensions the powder will do more than double the work, which will, of course, very effectually hasten completion. The blasting is done by means of an electric current, the one used is the "Ebonite," manufactured by Messrs. Brothers, London, and from 20 to 40 holes are exploded at a time, breaking down from 6 to 15 cartloads of rock. At the blast the carriages are run back for a distance of about

Practical experience is worth far more than speculative statements deduced from theory. The following occurrence took place only last week:—Some quarrymen prepared a blast of nitro-glycerine in neighbouring quarry, and attempted to explode it, but had a mis-fire. They then prepared and fired four separate charges of gunpowder in cartridges, without exploding the oil, and not being able to accomplish their purpose, they abandoned the attempt, and left the oil unexploded for two days. Having been informed of this, we attended and examined the drill-hole, and on using a probe we found water-level near the bottom, below which the oil had, no doubt, crystallised. We then prepared and inserted into the hole a cartridge containing about $\frac{1}{4}$ lb. of liquid oil, with fuse and cap, and on firing it the whole of the oil exploded, doing its work in the most satisfactory manner. It was evident that the concussion from the powder explosions was not severe enough to explode the crystallised oil, though the stronger concussion from the small charge of blasting-oil did so. This is one

The questions arise are these—Is not the shaft in the wrong place and is there sufficient men kept in the ends to develop the resources of the mine? Agencies and merchants' bills go on whether the ends do or not. How long before it is intended to sink the winze west of new shaft from the 12 to the 20 or the "valuable piece of ore ground," as mentioned by the agents in their report to the last general meeting? When will the West Maria lode be seen at the 30 and how many of the new discoveries were to be made? It is high time for the shareholders to look into these matters. It is for itself, it is well known, is one of the best for profit in the county adjoining Devon Great Consols, and to bring it into a profitable state only requires Capt. J. Seccombe's advice to be acted upon, who, in his report of Oct. 23 last, recommends as follows:—"For the proper development of the mine, I consider all the levels should be continued east on the Capel Tor and West Maria lodes by further sinking of the shafts, and the sinking of the shaft at the foot of the new shaft be continued below the 20 without delay, it being the part of the mine where the chief prospects of success are located. This shaft

The general meeting will be held on January 29.
The report to be submitted states that at the date of the last report the amount of the company's investments was 34,291*l.* 8*s.* 3*d.*, in which the following further investments have been made:—Purchases: Ballarat Tunnel Company, 100 shares, 450*l.*; Hercynia, 2 shares, 75*l.*; United Extended Ballance, 100 shares, 404*l.* 4*s.*; ditto free, 20 shares; Ballarat and Clunes Alluvial, 100 shares, 32*l.* 9*s.* 4*d.*; Smeaton Plains, one-tenth, 74*l.* 15*s.* 6*d.*; South Clunes, 105 shares, 1067*l.* 5*s.*; Lord Malmesbury, 80 shares, 428*l.*; Prince of Wales, 100 shares, 2567*l.* 9*s.*; making a total of 37,107*l.* 10*s.* 6*d.* The following further calls have been paid on the above and previous investments:—Australasian Company, 5*l.*; Royal Saxons, 228*l.* 10*s.*; Sea, 4 Clunes, 1510*l.* 4*s.*; Avoca, or New Holland, 2*l.* 2*s.*; London and Melbourne, 2375*l.*; Corriedale, 450*l.*; Barfold Estate, 1739*l.* 4*s.* 9*d.*; ditto Mining, 150*l.*; Lord Malmesbury, 510*l.*; Pre-Emptive Right, 162*l.* 10*s.*; Clunes Donald, 2*l.* 14*s.* 10*d.*; 7140*l.* 13*s.* 7*d.*; making a grand total of 44,382*l.* 12*s.* 10*d.* Deduct amount recd for sale of stores—Nintingbool, 70*l.*; St. Arnaud, 31*l.* 10*s.* 9*d.*; of 6*l.* 3*d.*—152*l.* 6*s.* 3*d.*; making the total investments at close of year, 34,291*l.* 8*s.* 3*d.*, 1886*l.* 4*s.* 6*d.* The report, showing the position of the principal

of the undertakings in which the company is interested. It appears that few of them have during the last twelve months turned out as had been hoped and expected. In some instances a stoppage of work has occurred from want of funds, necessitating the reorganisation of the companies; and in others a larger amount of time and money has been required to develop the mines than was expected. One advantage in having a number of interests in mines is that one productive mine will compensate for several failures. Bearing this in mind, it becomes necessary that a company engaging in operations and investments of this description should treat them as a whole, and place the profits realised on the sale of shares against losses sustained in the unproductive ones. A great deal of experience has, however, been gained during the past two or three years, and the whole question of the course of the leads and working of quartz mines is now better understood, and failures, in consequence, less likely to occur. It appears, therefore, that the present time offers encouragement for persevering in the business for which the Victoria Company was organised. The profit and loss account shows that there is standing to the credit of that account £18,632 4s. 1d. The directors do not recommend a dividend at the present time. The following is the state of the company's finances:—Assets: At Melbourne, balance in Union Bank, 1807, 10s. 10d.; in London, at bankers, 437, 17s. 4d.; ditto on dividend account, 147, 10s.; bills receivable, 538, 8s. 5d.; petty cash, 9, 13s. 8d.; amount to be received on arrears, and on call due on Jan. 1, 1867, 28,587, 10s.;—56,607, 0s. 3d. —Debts and Liabilities: Bills payable, 411, 0s. 9d.; due to Port Phillip Company, 50, 7s. 6d.; trade accounts (say), 20, 7s. 6d.; unclaimed dividends, 147, 10s.;—41,957, 10s. 9d.

The last advice from Mr. Bland (dated Nov. 24) states that the London and Melbourne Company had made most satisfactory progress during the last month, was rapidly getting out of its difficulties, and bids fair in a very short time to be paying dividends.

The directors state that this (the Victoria) company holds 20 (40th) shares in the London and Melbourne Company, which cost £550, and that it has come into a state of very decided profit. It appears that the produce of gold for the month ending Nov. 21 was about 1600, at a cost of 650. There would, consequently, have been a satisfactory dividend for the month but for the circumstance of the mine being in debt to the bank. This debt, it appears, has been reduced from about 2000, to below 1000; and Mr. Bland writes, in the concluding part of his letter, that it has been decided at the last meeting of this company to make a call at once to pay off the debt to the bank, so that the profits as made might be applied to the payment of dividends. Supposing this mine to continue yielding as it has done in the last month, this company should be receiving dividends at the rate of 2000, to 5000, per month. The dividends received during the month ending Nov. 24 were—Clunes Alluvial, 2000; North Grenville, 167; Prince of Wales, 24;—3007.

EAST WHEEL RUSSELL MINING COMPANY.

A general meeting of shareholders was held at the offices, Austin-friars, on Thursday.—Mr. W. JARDINE in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice convening the meeting, and the minutes of the last were approved.

A statement of accounts for the three months ending November showed a balance of loss of 7537, 8s. 11d. The assets exceeded the liabilities by 907, 3s. 9d.

The report of the agents was read, as follows:—

Jan. 22.—After a careful examination of the mine, we beg to hand you our report thereon for the meeting appointed to be held on Thursday next, the 24th inst., showing the work accomplished during the past quarter, and the prospects in view. Homersham's shaft has been sunk 1 ft. 3 in., and now down below the 140 fm. level, 13 ft. 2 in., and a cross-cut will be commenced north for a 150 fm. level at once, for the intersection of the lodes.—Homersham's Shaft: The 140 fm. level has been driven east, and east of Roberts's cross-cut 20 fms. 1 ft. 6 in., the lode averaging from 4 to 5 ft. wide, composed of quartz, muddle, capel, prill, and some rich ore; and in the present end the lode is 5 ft. wide, of the same general character. There remain some 10 or 12 feet further to drive to reach the slide, on the intersection of which (looking at the course of ore following down the slide in the 120 above), and some 100 fms. to the east thereof, a great improvement is expected. In this level (the 140 east) a cross-cut, as was done in last general report, is in course of being driven on a small cross-course for intersection of the north lode, which in the upper level is exceedingly kindly, and contains some rich carbonate and red and black oxide of copper. In the bottom of the 130 east a winze (Friend's) has been sunk and communicated with the 140 fm. level below. The lode on an average is worth 12, per fathom. In the back of the 130 east a rise (Williams's) has been put up altogether 7 fms; the lode is 5 ft. wide, and yields saving work. The stones in back of the 130 are set on tribute at 12s. In 17, A footway is being put in at Friend's winze, and as soon as finished sloping will be commenced east as west thereof, where the lode is a good course of ore, worth 20, per fm. About 25 fms. east of Friend's a second winze is about to be sunk below the 130, where the lode is worth 12, per fm. In the northern part of the set two lodes have been laid open, about 30 fms. apart; the most northern underlies south about 18 in. per fm., and the southern one north about 4 ft. per fathom; and, according to this inclination, they form a junction about 33 fms. in depth. The latter is 3 ft. wide, and the former 2 ft. wide, both composed of capel, quartz, prill, and some spots of rich yellow ore—kindly. A trial shaft has been put down on the north lode 6 fms., and at the deepest point reached there are the same kindly indications. The country is also very congenial, and judging from the general appearances, we believe ore in good quantities will be met with at no great depth. We calculate to be able to sample at the usual time 100 tons of average quality ore.—JAMES RICHARDS, JOHN GOLDSWORTHY.

Telegram: Jan. 23: East Russell mine now up; a good improvement east of slide, in the 140.—J. GOLDSWORTHY.

Telegram: Jan. 24: Just up from underground; a good course of ore in the 140, worth 25, per fm.—J. RICHARDS.

The CHAIRMAN moved that the report be received and entered on the minutes, and the accounts be passed and allowed.

The SECRETARY said that in the statement of assets and liabilities there was not included the ore sold last week, which realised about 600.

Captain GOLDSWORTHY stated that the lode in the 130 fathom level, east of the slide, was worth 10, to 12, per fathom, but the telegram received that morning from Capt. Richards informed them that in the 140 the lode had been cut through, and the lode was now worth 25, per fathom. There were paying 25, per fathom for driving and during the last three months there had been driven 21 fathoms 1 foot 6 inches. He further mentioned that at the time of the last meeting the lode in the 140 was not to value.

The SECRETARY read an extract from the report of the agents presented at the last meeting, to the effect that the lode in the 140, although poor, was exceedingly promising.—Mr. MICHELL supposed that in the estimate of the returns for the current quarter no account was taken of any ore that might be returned from the 140 fathom level end.

Capt. GOLDSWORTHY said no account could be taken, simply because the improvement had taken place since the report was written.

Mr. MICHELL said if the lode in the 140 continued of the same value as at present it would by the next meeting turn out about 5000, worth of ore.

Capt. GOLDSWORTHY further stated that the slide had been more perpendicular in the end than was anticipated, there having been not more than 4 feet, while 12 feet were calculated upon. The ground remained as easy east of the slide as it had hitherto been.

The motion for receiving the report, ordering it to be entered on the minutes, and passing and allowing the accounts, was put, and carried.

The CHAIRMAN, referring to the motion of call, stated that the committee, after due consideration, suggested that it should be per share.

Mr. MICHELL said that as there was good reason to suppose the 140 would turn out a considerable quantity of ore during the next three months, which had not been included in the estimate of the agents, he considered a call of 2s. 6d. per share would be ample for all their requirements, and proposed a resolution to that effect, which was seconded by Mr. GOMPERS.

Capt. GOLDSWORTHY stated that in the 130 there was a good course of ore for something like 14 fathoms in length, and good ore ground quite up to the winze, which was 25 fathoms east of the present winze. There was a kindly lode in the end of the 130, but the level was not at present being driven, as orders were received some time since to suspend some of the tubwork bargains.

Mr. T. NICHOLLS said that in Old Wheel Russell, at a distance of something like 360 fms. from where the same lode was being opened up in East Russell, the lode had proved to be worth from 8 to 10 tons of rich ore per fathom.

Mr. MICHELL had as great faith in the north lode as in any one point in the mine.—Captain GOLDSWORTHY considered, without pledging himself to the statement, that the produce of the ore would certainly be in the "teens," and would probably realise about 10, to 12, per fathom.

Capt. GOLDSWORTHY, in reply to a question, stated that both Capt. Richards and himself would like to see more done before recommending the erection of a new engine, or the position of the shaft. Looking at the present character of the "country," the present engine would probably take them down 20 fathoms deeper. They were now sinking two trial shafts on the lode, but it might be necessary to go further east.

Mr. BRADLEY said that as there was a valuable course of ore, worth from 8 to 10 tons per fathom, in the adjoining mine, upon the same lode, and at a very considerable distance from the present point of operation in East Russell, it was impossible yet to say where the best part of the lode would be found.

A call of 2s. 6d. per share was made, and a resolution was passed convening a special meeting on Feb. 21, for the purpose of forfeiting all shares upon which any call made prior to this date shall then be in arrears.

A vote of thanks was passed to the committee for their attention to the company's affairs during the past three months.

A similar compliment to the Chairman terminated the proceedings.

CROSIER VALLEY AND PORT MADOC FREEHOLD SLATE COMPANY.

A general meeting of shareholders in this company (now winding-up voluntarily) was held at the company's offices, Moorgate-street, on Thursday.—Sir EDWIN PEARSON in the chair.

The SECRETARY read the notice convening the meeting, and the minutes of the last were read and confirmed.

The liquidators' report stated that the realisation and distribution of the remaining assets had been delayed by the stoppage of the European Bank, having looked up 7000, of the company's funds on deposit; on this a dividend of 2s. 4d. in 11, was received in Oct. last. The company's plant at the quarries realised 611, 2s. nett at auction. The mineral rights and buildings erected on the works have not been sold. It is hoped the cost of the action of ejectment against the Slate Mountain Company will be reimbursed. Mr. C. E. Spooner has inspected the company's property, and his report is such as "will satisfy the shareholders that it is useless to expend any more money upon the quarries." The liquidators, however, recommend, on Mr. Spooner's authority, three quarries in Germany, on a projected and sanctioned branch of the Berg and Mark Railway, which require 20,000, capital—the purchase money being 7000, of which 5000, will be taken in cash and 2000, in shares—and where labour is cheap, the slate good, and a market available. Mr. Spooner is an interested party, and, therefore, suggests the quarries should be independently inspected.

The CHAIRMAN said that he need not detain the shareholders with any remarks on the liquidators' report, copies of which had been cir-

culated amongst the shareholders. The sum of money dealt with was very small, and had been divided amongst the shareholders. There was still the balance due from the liquidation of the European Bank, which would be divided as soon as received. There was another item in the accounts which might require some explanation—the costs in the proceedings against the Slate Mountain Company, which he (the Chairman) had no doubt would be recovered. The plan would be drawn up as much as the length of the stroke of each engine, and then would be stepped on to a platform, and then on to the rod on the other, which would just have completed the down stroke, and would be ready to ascend. At first it was intended that only a few men should ride in this manner on the pumping-rod. The shaft being all open and unprotected, it required a deal of nerve to step across the yawning abyss below, but it was found so advantageous that, eventually, arrangements were made to carry all the men; and, Mansfield, in Prussian Germany, a plan was adopted by which the platform nearly touched each other, so as to avoid this danger. In Cornwall the ascent and descent is made in a similar way, but independently of the pumping-rod, by what is called by the miners there "the man-engine." Most admirable cunnings of this kind has been put up by M. Waruque, at his colliery at Corn-mout, where the step is large enough to accommodate two persons at once, so well boxed in that all risk seems to be removed. He spoke of risk, because there had been one or two sad accidents with the man-engine, arising from persons going down by it, who, not being accustomed to the noise of a pit, their coolness and presence of mind, did not keep clear, and came into contact with the beams. He was very sorry to say that a promising young student in this institution, and a French gentleman, had recently been killed in this manner. In England a great improvement had been made in this respect, and instead of two rods, a single rod was put in, the steps being 2 fathoms apart, at corresponding intervals rollers are constructed, which the steps all but touch. It makes about eight strokes in a minute, and 12 feet at a stroke, so that rate of ascent or descent is 72 feet in a minute. These machines have been down in the Povey Consols and the Great Levant and other mines in Cornwall with great advantage. The expense of this single-rod system is not considerable, and wherever a shaft is 150 fathoms deep or more, a man-engine should be put in. There is good reason for believing that this mode of conveying miners up and down the shaft is in the end a great saving to the proprietors of the mine, to say nothing of the great boon it is to the men—getting rid not only of the inconvenience of climbing, but conferring upon the men many more of health and usefulness than they formerly attained to. Thus the man-engine is a great advantage to all persons concerned, and ought to be introduced in cases where the shaft is 150 fathoms deep or more.

The report was then received and adopted.

The CHAIRMAN then drew the attention of the shareholders present to the proposal to work certain slate quarries in Germany, and Mr. SPOONER laid before the shareholders plans and papers of the property, and his report states that "The quarries have been worked with a small number of men for the last three or four years, and a considerable quantity of slates made. There is a large space of land attached for deposit of spoil and erection of mill buildings, cottages, workshops, &c. There are two quarries upon a small scale on two different veins, one on the open plan and one underground; but the fact is, the owners are limited as to capital, and not in a position to work these veins except in a very small way, and have now no more than fifteen or eighteen hands at work. Notwithstanding that these quarries are in their infancy, and merely worked near the surface, a profit can be shown upon money laid out; also what has been done clearly exhibits a very marked improvement in the slate rock as increased depth is attained. The veins lie in a position to make a large and extensive work. The increasing demand is so great in Germany, accompanied with high prices, that the object to be sought is to develop the quarries with the least possible delay, to be in the position of large production to meet the growing demand. On my return from a visit to the works in the autumn, it was determined to take steps toward working the veins on a large scale and in the most expeditious manner. It is stated that fully 100,000 tons of foreign slates (Welsh, French, Belgian, Swiss, &c.) are annually imported into Germany. Good roads lead to several railway stations, and the Prussian Government has given a concession to the Bergisch Mark Railway Company for construction of a line of railway which will pass close to the quarries, and when made will be in immediate communication with the main German lines. The carriage to the nearest railway station is about twenty-one English miles, and costs, at present, 9s. 7d. a ton; but after the construction of the projected railway, the cost will be reduced to about 2s. per ton for the same distance. The wages for quarrymen average—for boys, 1s. 2d. per day; cutters, 1s. 4d.; splitters and best quarrymen, 1s. 10d. for twelve hours' work. The sum of 20,000, will be sufficient capital to embrace the amount required by the present workers and owners, viz.: 5000, paid them on entry, and 2000, allotted in shares. The capital here named is apparently small; but the fact is that the sum required for working 'the rock' is proportionally small, as small slates are made within 15 feet of the surface, which find a ready sale. Copies of the deeds of the property, with any further information, will be sent when required; they are at present in Germany."

In reply to a shareholder, Mr. WALLIS said that he would not propose any amalgamation of the German properties with the Crozier Valley Company; it must be completely wound-up, and the German quarries worked as a distinct company.

A vote of thanks to the Chairman terminated the proceedings.

Royal School of Mines.

MR. WASHINGTON SMYTH'S LECTURES ON MINING.

LECTURE XXIV.—The lecturer commenced by saying that he intended now to bring before them, as a necessary preliminary to dealing with deep mines, the modes for gaining access to them, and the descent and ascent to and from the workings. In the first place, mines of a small depth are worked by a downcast, made in a succession of steps or steps, almost like the ordinary plan adopted in a cutting for a railway. In Derbyshire many of the iron mines are so arranged, and a few steps suffice to get down to the work and back. Again, there was another plan, no doubt derived from that, in which steps are cut in the rocky floor of the vein, sometimes throughout the plane of the lode itself or the continuation of the lode; and there is a convenience in this plan when it is desirable to introduce horses, as the steps can be made sufficiently broad, and of a moderate height, so that horses might be taken up and down. This is a common practice in the Mostyn Mines, in Flintshire. In some lead mines in Great Britain, and the salt mines in Portland, and in the Beaumont Mines in Cumberland. This is a matter which depends much upon the depth, an increase in which has led to modifications of the plan in the salt mines of the Alps, where the steps are cut with slopes between at an angle of 33°. This may not appear a very serious affair, but it is important in every case to make the descent and ascent to and from the work as easy as possible. In the quarries in North Wales, where a hard stone is worked in sets, there are escapements with railings between them, which run at about the angle of the most convenient amount of rise in the steps or ascent that can be adopted. If the gradient be raised to 45° it will be necessary to have a hand rail approximating to the conditions of a ladder. A variation in this is a curious system they have in use in the salt mines of the Alps, in which there are inclined shafts, with steps on the side made of pieces of timber at each step to tread on, but having besides a couple of rows of rounded pine timber, upon which the miners slide down in a sitting position, shooting to the bottom with wonderful rapidity and perfect security. The next step is to these vertical shafts which are assisted by ladders. If we pass to the smaller lead mines of the North of England we shall find that they have very rude methods of descent, and that in many cases in Derbyshire also it is effected simply by a number of pieces of wood projecting from the sides of the shaft, driven in between the stones of the walling. A great inconvenience attends this plan, as there is often a strong draught, which may extinguish the light carried by the person descending; and then, if two or three of these steps be worn or knocked away in succession, he is exposed to great peril. This plan is, however, only used in mines on a small scale. The next step to this is putting in stemples, which are placed across at 4 ft. asunder, some times parallel and sometimes transverse to the walling of the shaft. These are made of 2 or 3 fms. long, these are very suitable; and thus, instead of by regular ladders, the men climb up and down by the cord used to keep open the slides. This is a sort of acrobatic work, which, however, leaves its effects on the muscles for some days. Those stemples, no doubt, allow of a firmer hold; but when, as in Yorkshire, they are placed where the depth is from 40 to 50 fms., it is very hard work, and they are so large for the hands that those accustomed to a good ladder will not approve of them. Ladders are the ordinary means of descent in most properly managed mines when machinery is not employed for lowering and drawing down the men. The stemples are not used in America, and in some parts of the North of Europe, and it is a kind which is the most advantageously employed when blasting is going on, and when, consequently, smaller ladders would be knocked to pieces. It is formed of a strong beam of wood, in which steps are cut out at proper distances. Another sort is very often used (although it is not to be recommended where there are a great number of men), in which strips of wood are nailed across an upright, like a poultry ladder, and placed against the sides of shafts for a considerable height. Wherever it is used, better means ought to be adopted for fixing the cross-bars securely. The stemples are used in Saxony, and are put through the wall in the side pieces. In England they are usually round, and made of ash; with, in Cornwall, at the distance of every ten or eleven, a strong wrought-iron stave, which holds the ladder firmly together. As a rule, iron staves are not advisable, and in winzes and places not often travelled through they will sometimes be found to have utterly perished, so far as strength is concerned, nothing being left but a mere crust. The distance at which the staves are placed asunder is a question which very greatly affects the comfort of the men. If they were as close as those of a bricklayer's ladder nobody would like them. It is usual in mines to have them from 1 to 12 in. apart; 12 in., however, are found to be more comfortable than 1 in. If they are too close, the men are obliged to take a great deal of time to get out of the shaft, and, on the other hand, it is too short a distance: 11 in., therefore, will be found, as a rule, to answer best, and that rule is generally adopted in Cornwall. Ladders are sometimes made of chain, for the purpose of being used in winzes, and are so far convenient that they can be raised from places where they are seldom wanted, and removed elsewhere. But, whatever the mode in which the ladders may be constructed, the most important thing is the manner in which they are placed. The lecturer then drew attention to a model representing a portion of a shaft in Saxony, in which the ladders were placed from one platform to another, a system followed with more or less of variation in all extensive metaliferous mines.

If we have an inclined shaft 450 fathoms, it is convenient to put the ladder along the footwall of the lode, but not close to it, so that any rubbish falling may pass through. In vertical shafts the ladders must be placed at an angle which is easy to climb, although a great deal will depend upon the size of the shaft. This is a subject which requires great care. At this moment a great number of our mines have the ladders placed so badly, that where there are considerable distances to climb the health of the men is most seriously injured. It must always be remembered that these things are not done from any first as it would cost a great deal of money and time to take out a set of ladders and replace them with better. The worst ladders are those which rest upright against the wall of the shaft, of which there are not many cases now as there used to be. A daily ascent and descent of 50, 60, or perhaps 80 fathoms, upon a perpendicular ladder, is found to affect the heart and lungs very powerfully and injuriously, besides the danger of instant death by missing foot-hold or hand-hold. It is now, therefore, considered necessary to give an angle of inclination (say) of 75°, which a man in good health may use without great exertion, and without prejudicial effect upon the heart and lungs of any kind, besides which such ladders are much less dangerous. The question, then, is how to get that angle where the shaft is perpendicular. This is done by a system of rollers, by which the descent is divided. Each of these rollers has a man-hole, with a trap-door, so that in case of accident a man would not have a fall, which must necessarily be fatal. In the Harz and in Norway, where everything is done that is possible to be done for the health and safety of the workmen very short ladders are used, the length not being more than 2 fathoms, and each roller is well guarded with slides. In Saxony and in Cornwall lengths of 4, 5, and 6 fathoms are common. In the ordinary run of English mines, from 20 to 40 fathoms are the lengths which prevail. These long lengths, however, are all more or less painful and fatiguing, and the deeper mines the average life of miners is shortened in consequence of this, the vitiated air they breathed, and other reasons, so that many plans were proposed to get rid of this labour. This was the lecturer's stated, first done in this country by raising the men by means of the same rope and chain which raised the mineral, but it was found so full of risk that the proposal (and in metaliferous mines especially), was not received with any satisfaction. It was found, from comparative statistics, that there were more accidents when the men were raised by rope or chain than before, and it was wonderful they were not even more numerous. In Belgium, for instance, the accidents in one year where ladders are used were only 1 in 2665; while in Charleroi, where ropes and chains were used, the number of accidents and men being equal, the fatality by accidents were as many as 1 in 118, or more than double. The first step to the solution of the difficulty was taken at Fabrikunst, in Germany, by employing the pumping-machinery, and it was put into practice there just at the time a pre-

mum was offered in this country by the Polytechnic Institution of Falmes for the discovery of some objectionable means of lowering and raising miners, and schemes on exactly the same principles were simultaneously devised by Mr. Oppenheim and Mr. Lewis. In 1840 the new plan was adopted in Great Tresavean and United Mines. Watching the action of the pumping, the two observers conceived the idea that by making a foot-hold on the rod which would be drawn up as much as the length of the stroke of each engine, and then would be stepped on to a platform, and then on to the rod on the other, which would just have completed the down stroke, and would be ready to ascend. At first it was intended that only a few men should ride in this manner on the pumping-rod. The shaft being all open and unprotected, it required a deal of nerve to step across the yawning abyss below, but it was found so advantageous that, eventually, arrangements were made to carry all the men; and, Mansfield, in Prussian Germany, a plan was adopted by which the platform nearly touched each other, so as to avoid this danger. In Cornwall the ascent and descent is made in a similar way, but independently of the pumping-rod, by what is called by the miners there "the man-engine." Most admirable cunnings of this kind has been put up by M. Waruque, at his colliery at Corn-mout, where the step is large enough to accommodate two persons at once, so well boxed in that all risk seems to be removed. He spoke of risk, because there had been one or two sad accidents with the man-engine, arising from persons going down by it, who, not being accustomed to the noise of a pit, their coolness and presence of mind, did not keep clear, and came into contact with the beams. He was very sorry to say that a promising young student in this institution, and a French gentleman, had recently been killed in this manner. In England a great improvement had been made in this respect, and instead of two rods, a single rod was put in, the steps being 2 fathoms apart, at corresponding intervals rollers are constructed, which the steps all but touch. It makes about eight strokes in a minute, and 12 feet at a stroke, so that rate of ascent or descent is 72 feet in a minute. These machines have been down in the Povey Consols and the Great Levant and other mines in Cornwall with great advantage. The expense of this single-rod system is not considerable, and wherever a shaft is 150 fathoms deep or more, a man-engine should be put in. There is good reason for believing that this mode of conveying miners up and down the shaft is in the end a great saving to the proprietors of the mine, to say nothing of the great boon it is to the men—getting rid not only of the inconvenience of climbing, but conferring upon the men many more of health and usefulness than they formerly attained to. Thus the man-engine is a great advantage to all persons concerned, and ought to be introduced in cases where the shaft is 150 fathoms deep or more.

LECTURE XXV.—They had so far cleared the way in the first lectures of preliminary subjects, that they now might take notice of the actual working of mines, with special reference to the mode in which they ought to be commenced and carried on, according to the scale which the operations were intended to assume. If they could see their eyes over the plan of a mine they would see it was divided into shafts and horizontal levels, drifts, or galleries. These levels opened the mine at the surface; the drifts were the ordinary level of the mine, and the shafts were the means of descent and ascent to and from the workings. They were what was called the "main engine," and were used for the transmission of water into the mine; the fifth are drainage adits or water levels, employed for the purpose of conveying water from the ordinary workings of a mine; the sixth are principal main adits, which are sometimes undertaken for their own sake, and are of great importance, and, therefore, necessarily constructed on a large scale, to 150 fms. and upwards; and the seventh are large levels to be used for conveyance by canals underground. Generally speaking, the levels driven in metaliferous mines are more or less higher than they are broad, (say 7 ft. high and 1 ft. or 5 ft. wide, whereas in coal mines or stratified deposits are broader than they are high; and the form of the level depends on the thickness of the seam or bed in which it is driven. The character of the roof and floor, but they may be taken, as a rule, to be tolerably rectangular. Where there is great traffic there must be room for station wagons to pass with facility; and sometimes they are made to convey the ore below the road. And, now, a few words with respect to each of these classes of levels.—1. The first class, or exploratory drifts, are generally small, but the rule can be laid down for them. In the ancient mines, and even now in the modern mines, they are often made so small that a man has to walk down up; but of late years these small dimensions are less adhered to, and the drifts are made larger, and you will find where there is a couple of pits put down that there is an exploratory level driven between them of such small dimensions that a man is only able to creep through it; but it has been satisfactorily proved that it is not a judicious plan to reduce the levels to such a small size, on account of the inconvenience to the men and the difficulty of passing a sufficient current of air through them. In Yorkshire they drive what are called "dark drifts," which are only 4 ft. high and 2 ft. or 3 ft. in width, giving but room sufficient for a man to pass through in a constrained attitude, pushing before him a small wagon called a driving-wagon.—2. Ventilation drifts are of a variable size, but are generally small, and even smaller than the Yorkshire drifts, as being considered economical, although it is a poor economy to all the drifts for the conveyance of air of too small a size. They are generally 4 ft. or 5 ft. square; but in stratified deposits it is more usual to have ventilating drifts of the same size as the principal working roads of 100 ft. or 120 ft. in diameter. In Staffordshire, for instance, where there are enormous seams of 100 ft. or 120 ft. in thickness, the ordinary travelling roads are 7 or 8 ft. in height, but a separate opening is cut as we air-drift, and then the small dimensions are adhered to, where the top, or sides, are of a crumbling nature, the ventilation is apt to be rendered extremely feeble, besides the difficulty of travelling through to clear the way.—3. The third class, or ordinary levels, or roadways in metaliferous mines, often depend upon the width of the seam in which they are driven. They are generally 5 ft. or 6 ft. high, and when anyone had the misfortune to be obliged to travel through the whole level they found it very painful to adapt themselves to the miserably small dimensions. They are shaped like a coffin, to give a little more room for a man's shoulders, and are rounded in at the feet, so that when anyone was passing through the air was scarcely got by him. These were invariably of small dimensions, and could be traced back from the time of the Romans down to the end of last century. From that time an improvement in this respect began to be made until at length they are now made 5 ft. or 6 ft. in height and from 2 ft. to 4 ft. wide. During the last 30 years it has been sufficiently shown by the practice of all the better mines, both on the Continent and in our own country, that the best to have a clear height of 7 ft., and as large a width as from 4 ft. to 6 ft. Even in those mines in Yorkshire, with such small air-ways, the main levels are clear openings of this area; and if timber or stonework has to be put in, it should be left, so that there will be no obstruction to the air. In the Foxdale Mine, in the Isle of Man, where the lode is very variable, but sometimes large, and sometimes almost invisible, and when very strong, the level has to be put in the dimensions kept up are 7 by 5.—4. Adits for raising water into the mines ought to be carried at a moderate inclination, and the fifth class, that of drainage levels, or adits, are very similar to the latter, but they are not so steep, and it is seldom necessary to resort to the dimension of 7 ft. by 5 ft. It is, however, of the greatest importance to the health and comfort of the miners that a good water channel should be established. Too frequently the water is allowed to run along the bottom of the road, and the men have then to walk through it. The water very often is green and stinking cold, and the men who have to do this are much troubled with rheumatism, &c. (Mr. Smyth) should be exceedingly glad to see the foreign system introduced, by which in such cases the water is carried under a flooring, and the men affected pass along dryshod. If the mine is one in which there is a large quantity of water, it is necessary to make the adits 8 feet high, so as to have a floor level, and leave the men room to walk. It is sometimes necessary to make the adits of such proportions as to allow for the passage also of air currents. In the slate districts these adits are made so small that they are called in the district of counties more "soughs," but in metaliferous mines that cannot always be done.—5. In the case of adits intended to unwater large districts, comprising several square miles, and to receive the waters of several mines, it is necessary to have them 9 or 10 feet in height, and of proportionate breadth.—7. Then, as to the shafts, they are comparatively rare, but some enormous works of this nature were carried out at the end of the last century by the Duke of Bridgewater, and the canals boats of large size brought the contents of the mines to the day.—8. There are certain points in cutting drifts which are at all times deserving to be considered by mining engineers. One is, that they should see that they carry on the drift of the size, and in the direction, agreed upon. This is always an easy matter, as the men are apt when they are hard grounders to diminish the size or alter the direction. A second point is, that care should be taken that the rise of the sole is kept regular, as the men are apt to get it can arranged an angle, in order while at work to escape from the water. The engineer should keep his eye upon this, and bring them back at once to the proper position as if they go far such a going back occasions much murmuring. It is, however, as a matter of great consequence, because, in levels of any considerable length, the elevation of the angle, even in a very small degree, occasions the loss of a considerable amount of ground which would otherwise be gained. The levels should be driven as straight as possible, the men being allowed to serve to the one side or the other. If you have by a certain expense succeeded in reaching a certain point, and proceed to extract the vein by expensive machinery, you expect to raise all the mineral to that same depth; but if during the men have raised the floor, or made any of the deviations he had expected, they would find a good deal of mineral would not be got to which they are entitled; and the loss would be the greater if, after beginning to serve a first, the levels extend to any great length. One more point he would mention with respect to levels, which was, that in driving levels in stratified rocks of the highest importance to arrange them so as to have the dead level, as it were, in the subsequent works. This was done very early in South Wales and Gloucestershire, by the men carrying a broad board before them. With reference to adits, he would say a few words on the mode of unwatering large districts. It has been found in districts which are watered, that a general scheme including several mines is less expensive than operating on each individually; but greater difficulty arises in England, in consequence of the property being in so many different hands. On the Continent where the property of minerals is vested in the hands of the Government, it has been done in many instances, and great advantages have resulted from the establishment of water adits on a large scale, to be used by a wide district of many mines. In Derbyshire this has been attempted by the formation of "sough companies," who expect to be remunerated by getting a royalty on the ore got from the mines by means of their soughs; but they have not been successful, and the undertakings so prosperous as they had a right to expect, as there are not some people who will stand out, and there are other obstructions met with.

JAN. 26, 1867.]

all, the great county adit is a remarkable work of this kind. It takes the level of the district east of Redruth, running no less a length than thirty or forty miles, and draining a great number of mines. More remarkable still is the great George adit at Clausthal, in the Harz, which reaches a depth of 6 fathoms, and unwaters the mines to that enormous depth. This adit is ordered after our King George, and was remarkable for the rapidity and skill with which it was driven. It was commenced in 1799. A number of shafts were sunk, and levels driven, right and left, from the bottom of each till they met, and at thirty different spots the work was pushed on by independent shafts. Another famous work of this kind was carried out by the community of Schemitz, in which 1600 fathoms were driven, with the advantage of an adit. The tunnel of Munkwitz is a work in which similar conditions exist to the absence of a shaft, but the difficulty is surmounted by driving parallel levels, so that one acts as the down draught, and the other as the upcast shaft, and thus a sufficient ventilation is established. [These different works were all explained by means of diagrams and drawings.] A remarkable work of this kind is just now being carried out by a private gentleman, Mr. Lumsden, in order to unwater the mines of Cumberland. The work, which has been done under the direction of Sir W. Armstrong in a most superior manner, is now done by all students of this branch of engineering.

[ADVERTISEMENTS.]

From Mr. JAMES CROFTS:—PRINCE OF WALES, whether for speculation or investment, continues to be one of the most prominent mines on the Cornish coast. A valued and experienced correspondent residing in the neighbourhood of the mine, has sent the writer the following account of it:—"Prince of Wales looks well to make a writer's fortune if I speculated at all in shares, which I do not now, I should spend my eye on them, as they will take such a jump some day, indeed on the real merits of the concern, and not on that camelion-like offspring men's opinions, except a 'market,' that some of the knowing ones, and especially the 'prudent' men, will be left in the rear." **MARKE VALLEY**, from the same authority, "I am always looking for similar circumstances occurring in this mine, there have been some very striking points to come off, and has a good chance of being as successful as any other mine in Cornwall." Also he writes of **BOTTLE HILL**, "This mine is frozen up, but it will come out as a great gem when it gets a start again, which will be as soon as the weather breaks up." At 9s. to 10s. the shares are as cheap first. However, the last dividend in May, 1866. At the approaching meeting a report will be made that there will be upwards of 1000*l.* In hand, available for dividends on the shares, at the discretion of the meeting. A fair argument may be founded on the state of things, that if any mine can pay fairly out of profits on the present low price, the shares in the face of a certainly rising market for the metal must be placed in the safest class of investments. The share next to the me authority of a contemporary writer in the shares deserve particular attention, amount of 5*s.*; and consequently already spent on the mines, but its prosperity (a year) was about 5*s.* appears to date from July, 1866, when the last call was made. There seems great credit due to the present management, in dealing with a very expensive mine round to a dividend state, it being besides a dry draught of notoriety that its fortunes at one time were at a very low ebb. The value of ore during the last half-year of 1866 were 172*t.* tons, averaging 3*l.* 10*s.* per ton. The ore is, therefore, poor, but greater depths are attained in working the mine. Whether the ore given mine is worth 3*l.* or 6*d.* per ton is not a very important question, provided there is enough of low-priced to cover not only the cost of working, but to pay dividends. **DEVON CONSOLS** varies have been worth during the period above alluded to 4*l.* 2*s.* 6*d.* per ton; **SILVERDALE**, 3*l.* 4*s.*; **NORTH CARADON**, 7*l.* 5*s.*; **WEST SETON**, 3*l.*; **WHEAL SETON**, 18*l.*; and **MARKE VALLEY**, 3*l.* 6*d.*.—**N.B.** All the above are dividend mines, except Wheal Clifford, and they are the only ones out of the general class of shares which have sold above 1000 tons of ore in the said six months. **AIR-RAILS:** The following particulars may be accepted as a limited company, in 1866 shares, with 3*l.* 6*d.* per share paid-up. The last dividend (January 28*th*) was 2*s.* 6*d.* (dividend was made), the balance of assets over liabilities amounted to 154 tons of lead, and thus the mine has evident capabilities for paying large profits, especially in an improved market for metals, not forgetting the ore or winter, which is shutting up half the mines working almost everywhere at a temporary inconvenience, which softer winds will ameliorate. At the present price the shares may be considered very cheap, and a prudent investor. It is seldom that a better example can be given of useful advice taken by the mining public than in the case of **WEST CHIVERTON** shares in juxtaposition with those of **DRAKE**. Founded upon statistics of the *status quo* of each of the two properties a month ago, when West Chiverton were about 52*l.*, and Great Drake 19*l.* per share, it was predicted that one mine would advance considerably, and the other fall in value. The public have acted upon this advice, and on a large scale, and see the result. West Chiverton are 61*l.* to 62*l.* per share. Great Drake 17*l.* to 17*l.* 10*s.*, and probabilities seem to tend towards a still further advance in the former and a further fall in the latter, and yet no more can be justly ascribed, by comparison with what has happened elsewhere. First importance, but unfortunately, in 1866, whilst West Chiverton is in what is considered moderate success, Great Drake is in a state of depression. Being ignorant of them, the writer would enquire how the adverse influences depressing the shares of the latter mine? According having been given to the writer so many valuable details on **DRAKE** and **WHEAL SETON** MINES, he has to note, in the first place, that from an almost nominal the shares have advanced to 25*s.*, 2*s.* 6*d.*, and which is reported to be very much below their value in the present condition of the concern, and some 1000 percent. lower than the shares are susceptible of advancing within a short period. It is considered as the oldest and richest mine in the district, and is noted for all the exact locality Calstock, on the banks of the Tamar, and it is noteworthy that it adjoins the most prominent and, perhaps, to be hereafter celebrated mine in the county (**PRINCE OF WALES**). The ore is esteemed as about the richest in Cornwall, and in the palmy days of Ald Lang Syne, for that metal, was worth 50*l.* per ton. The machinery for dressing the ores (which the writer has seen and admired) is perfection. With another advance or two in tin it is stated that the mine will be encouraged to sell about 25 tons monthly, and enable it to resume dividends. There is 2*s.* 5*d.* per share paid on 12,800 shares; the exact number of its neighbour, Prince of Wales, which it is hoped and expected will shortly resemble in some other respects, and the prospect is bright for the shares. The last dividend was 10*l.* 10*s.* expended. Enough is here shown to encourage the holders of Prince of Wales-shares to buy at once into Drake Walls, and the shares of the latter mine are beginning to be entertained that EAST LOVELL is at the point of an advance in price. They stand at 10*l.* 10*s.* to 11*l.*, and how stands the statistics of the mine, and especially in connection with advances in tin? An important discovery is shortly expected in the 69 ft. level, and at the next meeting (not stated when?) good profits will be exhibited, and a dividend declared, the last having been in May, 1866, of 7*s.* 6*d.* per share. The lodes are valued at exactly 20*l.* per ft. m. throughout the mine, and it is not doubted that they will continue, or in other words, the mine in all its 1906 shares, and the shareholders particularly dwell upon this item in all his elucidations of mines as a criterion of price and value of shares, although too little attention is, as a rule, paid to it. Slight arithmetic will settle this question by those who are disposed to attach to it the importance it deserves as a corollary to their decisions on the choice of mining properties, as either investments or speculations, or both.

From Mr. EDWARD COOKE:—The market has been exceedingly active during the week, and a very large amount of business done in several mines which have been prominently before the public for some time past. The advance in price of West Cliverton, Drake Walls, North Crofty, Prince of the Mountains, and East Lothell, &c., has been considerable. The prospects of the mining industry must be considered to be more favourable than for a very long period. The dividends that may be made by a judicious outlay are apparent to those who might have adopted my suggestions. A few weeks since I stated that there were ten companies that I thought would be almost certain to result in large profits. Out of these, seven of them have risen during the past three weeks more than 20 per cent. One of them I then alluded to—**EAST LOVELL**—has been almost trebled in price; but although the shares in this mine have not yet been affected in price, as sure as I am writing these remarks, East Lovell shares will anticipate a very great rise, not upon mere market operations, but upon the real merits of the property. It is unquestionably a rich tin mine, and with a good dividend in prospect at the next meeting. The shareholders probably will not be disappointed in their shares. **PRINCE OF THE MOUNTAINS** shares have been more than trebled in price, and as far as the mines are concerned there is not the least reason to doubt that notwithstanding the late severe weather, upwards of 400 tons of tin ore will be sold for the month, together with the usual quantity of tin concentrates. The hindrance in the dressing operations, occasioned by the frost, is very satisfactory. With such large returns of ore, and monthly profits, were it with the certainty of a 5s. dividend next month, it does appear a perfect anomaly to see these shares selling at anything like 4l. There is no speculation in buying **Prinsep United** shares at present prices, but a safe and lucrative investment, which is likely to pay 25 to 30 per cent. upon the current price, and the very probability of a rise of several pounds per share in their market value. As **CALDERHEAD FELLS** shares I still strongly recommend to be purchased while they are selling at such a ridiculous price. Looking at the working connected with the company, and the prospects before them, it is a splendid mine, and I can say with no other conclusion than that it is well deserving the attention of those desiring an eligible and legitimate investment at a very low price. **WEST CARADON** shares will not stand long at their present value, and I would now here offer a suggestion that will be profitable to those who adopt it—to buy a few shares. The prospects are of a very high order, and there are points to come out that will materially enhance the intrinsic value of the mine. There are two, or three other mines I could name that may be bought with safety for a very considerable rise in market value.

From Mr. GORGE BUDGE: For shareholders in the copper, lead, and zinc mines of this country the New Year has opened with a promise of better things than the disasters for which 1866 will be for ever memorable. The Metal Markets have for some months been in a state of inactivity, owing to the inter dislocation of trade arrangements, consequent on the commercial panic. The exceptional lowness of ruling prices necessarily affected the value of the raw material, and holders of shares in metalliferous mines have felt the result in diminished dividends, and in the depreciated market value of their securities. Dealing, however, with such staple articles of consumption as copper, lead, and zinc, rebound in value was only a question of time. It has come at last, and the market appears to be rising with the rise which has taken place in the market for many metals, as well as in the price of iron and steel. A dam nearly approaching a dividend state. Few better examples can be adduced of what a rising mine should be than GREAT NORTH DOWNS. This mine is situated in the Scourier and Gwennap districts, and the shaft sinking in a run of ore ground thoroughly well known to every Cornish miner. Great North Downs has already yielded large profits from a former working on the first or overlying series of ore ground, and the present company are sinking in the underlying series, which, as justly remarked by Capt. Charles Bowden in last week's *Mining Journal*, "has never failed to yield enormous quantities of mineral." If proof of the assertion be needed, it is to be found in the fact that the dam is nearly completed, but there is no necessity to go beyond the mine itself for evidence of its intrinsic value. At Sleggan's shaft, which is being rapidly sunk to the 86, they have a lode at least 5 ft. wide, worth 60s. per fathom. On the north lode, in the 70, the water is increasing, which is a good sign, and it is so strongly impregnated with copper that the agents have determined to resort to the pro-

cess of precipitation. Every point in the mine presents a highly satisfactory appearance, and it is worthy of mention that the excellent stuff is being broken in the bottom of the 75, 40 fms. east of Sleggan's shaft. In the production of this under-aking everything has been done which ample capital and executive skill could furnish. The whole of the machinery and surface works are of the best possible character, and investors on the look out for sound investments should take note of the fact that the stuff is coming down at the present low quotation. A very promising mine for an early rise in value is EAST ROSKWARNE. The ore ground, on which operations are being conducted, is looking well. The enterprise has a good reputation, and the shares are certainly worth buying at the present nominal figure. Why MINERA shares are so low as 145/- to 150/- is a problem difficult of solution. It is one of the best of the tin mines in the world, and it is not obtruded upon public attention, and, consequently, is little known outside the circle of professional miners; but to any person in quest of a good dividend-paying investment a few shares in Minera, at anything like the quoted price, would amply repay the trouble expended on their acquisition. WHEAL KITTY (St. Agnes) is a fair illustration of the effect produced on the market prices of mining properties by the depression in the metal markets. The market price of the shares of this mine, which is a dividend mine, and did not cease to yield profits during the entire period of depression in the metal markets, the market value of the shares dwindled down to 25s. Since the advance in the price of tin, however, the price has risen to 3*l.*, 3*s.* 10*s.* Even this figure is very low, and a hint to the effect that buyers now will not only be entitled to the dividend which is expected to be declared next month, but will also be able to realize a profit on their investment. Further, and more so, the market value at an early date, may not be without its effect in determining a few purchases in this well-known enterprise without delay.

From Mr. JOHN B. REYNOLDS, of Bishopgate-street Within:—As time advances Mining, as an Investment, continues to increase in public favour. This is extremely gratifying, considering the very trying time which we have just passed. The year 1894 is a very remarkable one; the Cornish mines themselves are, on the whole, looking much better, thus giving additional impetus to the good feeling existing. One of the mines which has lately had a very great rise in market values is COOK'S KITCHEN. The property is said to be looking very well indeed, and a greater advance is expected in the price of the stock. It appears to me that the merits of STRAY PARK are much overlooked. The shares are exceedingly low, and any Improvement of importance, which would enable me to sell at a profit, would be a great advantage. I am, of course, in the best of health, and hope to continue the pleasure of writing fully next week.—N.B. I have just been informed that in the 1903 act, at NORTH POLGARTH, there has been stones of ore

From Messrs. WARD and JACKMAN :—Did any of our clients ever travel from London to Cornwall in January, with the thermometer below 30? because if not, our advice is—"Do not." The scenery of that county is romantic at the best of times, but under the circumstances we mention considerably more so. We are not writing this on the top of Carna Hill, where the priests are wont to do their fusions from, although 68 miles may be seen from that eminence, but before a comfortable fire at that prince of hosteries, Tyack Hotel, Camborne. We have, however, visited several mines during the past few days, and the result of our enquiries we now subjoin.

NORTH ROSKEAR: This mine is now drained to the 230, where the lode is very large, and its composition very favourable for the production of tin and copper; in fact, the prospects are altogether more cheering.

WHEAL SETON: The next sale will be about 776 tons; and although this is less in quantity, in consequence of the inclemency of the weather, than the last, it is expected to realise more money. The winze sinking under the 170 fathom level is about 4 fathoms deep, and worth 10 tons, and the end in the 180 is worth 7 tons per fathom. The next meeting is on February 11.

WEST SETON is looking remarkably well. HILL TOP has worth 1000 tons. EAST BARNET declared on February 12.

EAST BARRET: The lode in the 130 is well defined, and good progress is being made. The account will be held here next Tuesday.

WHEAL BASSETT: This mine, under the very efficient management of Captain Martin, is looking better than for a long time past, and will resume dividends at the June account.

EAST LOVELL, it is said, will declare a dividend of 10s. at the next meeting. The report from the agent of the mine will be found in the usual column.

WHEAL BULLER: We have repeatedly referred to this property, and on a recent occasion advocated the desirability of dividing the sett, with the object in view of energetically working the eastern part of the mine, and the south lodes therein. We attended the meeting on Wednesday, at the mine, and after mature consideration it was resolved "That flat-rods be immediately erected, to drain the water from the level, and that the latter's shaft be enlarged, and the engine placed thereon, which will take about eight weeks' labour, to drive to intersect the tin lode now known to be standing in the bottom of the 80, and last valued at from 75*l*. to 100*l*. per fathom for over 50 fathoms in length. The whole of this work, there is every reason to believe, will be accomplished on or before the meeting in May next, when it will again be made special, to consider the subject of erecting a new engine, and dividing the sett."

From Mr. J. J. REYNOLDS (Union-court, Old Broad-street).—The increased demand for mining stock continues, and prices have been well supported. It is not probable that the prices of the mines to be mentioned will give any good results from British mining could so quickly arrive, are at last obliged to confess that there is bright promise for 1867. The lode intersected in the 55 fathom level cross-cut at PRINCE OF WALES is one of great promise, and adds considerably to the value of this property. On account of its locality, which is undeniably first-class, every variation is closely watched, and a ready market is always ready to be met with. An advantage which certain holders of this stock will fully appreciate. NORTH WILCOFTY shares continue in demand; they are 5½ to 5½, but will go much higher. REDMOOR shares have been in good demand at 8s. to 9s. GREAT WILCOFTY shares have been dealt in at 17½ to 18. NORTH ROSSKIL, 7½ to 8; call paid. WEST CHIVERTON shares have advanced to 63, 65, and should be bought without delay. WILCOFTY shares are 2½ to 3½, and are ready to purchase. An alteration in the price of NORTH DOLOMATH caused a few days' delay in driving the 100 fathom level; the shares can be obtained at a few shillings per share; the lodes are the same as those from which such vast profits have been made in Dolcoath Mine. I refer with much gratification to the advice contained in my letter of January 19, as capitalists who followed it can now realise a very handsome profit, trifling, however, compared with such a large one as the above. I have no more to say at present. On application I will furnish a list of six mines which are certain to be profitable to the investor.

From Mr. EDWARD BREWIS:—Business has been good in the Mining Market during the past week, the dealings in PRINCE OF WALES ranging from 30s. on Monday, to 40s., highest price, on Thursday last. NORTH CROFTY shares have been up to 6l., and, comparing this price with last July, when shares were selling at 5s., it appears that the enormous advance of 200 per cent. has taken place. ED. WHEELER, possessing splendid prospects, either for investment or speculation, should not be overlooked. A few years ago it belonged to North Crofty sett, and the position is all that can be desired. North Crofty adjoins it to the south, and Wheal Seton to the west, which shares are selling for 15l. each. It possesses lodes that have produced enormous quantities of copper ore, and the shares are only selling for a few shillings, and would seem decidedly the best mine to buy into at present. SOUTH CONDBURROW, $\frac{3}{4}$ to $\frac{7}{8}$ l. is also worth attention. CHIVERTON, 9 to 9 $\frac{1}{2}$ l. WEST CHIVERTON, 6l. to 6 $\frac{1}{2}$ l. or an advance of 10l. per share within three weeks.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GREAT WHEEL VOR.—At Wheel Metal another branch, underlying north, has been cut at the 204 fm. level cross-cut south. The new copper lode is enlarged. The 194 west is improved.

EAST PROVIDENCE.—This mine is turning out most satisfactorily after so long a perseverance, and is likely soon to be in the Dividend List. The productive lodes in Providence are all running through this sett, and some of them are at no great distance from the boundary. All that is required is a little more depth. The last sale was over 4½ tons of tin for the month, and a larger sale is expected next month. The Carbona is opening out wider, and tin coming into the 82 east.

NORTH CROFTY is opening out one of the richest mines in Cornwall: it is being wisely and judiciously worked. Additional stamp-heads are being erected, and when this is done it is said that the present returns will be nearly doubled: this, with a better price for tin, would give splendid profits.

DRAKE WALLS.—This mine is now attracting great attention partly from the fact that it has great reserves of tin, of a rich quality, and also that the rich copper lode of the Prince of Wales Mine runs into Drake Walls. The cutting of the Prince of Wales lode rich in the 55 fm. level must increase the prospective value of Drake Walls.

PROSPER UNED.—Previous to the recent improvement in these extensive mines, 2398 shares were relinquished out of 6000. Since the improvements the arrears, together with a fine, have been paid on the whole, with the exception of some 25 shares. This will put the mine in a good financial position, and it is to be expected that in 1907, when the next general meeting, and the meeting to be held next month a dividend of 5s. per share will be declared. The mine is well supplied with machinery, and, as the returns are now over 400 tons of copper and about 20 tons of tin per month, every improvement in the management of the mine will increase the profits. A moderate rise would increase the profits from 5000, to 10000, per month.

FURZE HILL WOOD.—The shareholders, awakened from their lethargy, have wisely resolved not to be caught in the trap so cleverly set, but to continue the works, and in such a manner that great results are expected at no great length of time.

BRYN GWIOG.—This mine has greatly improved, and still carries over a credit balance, although no call has been made for nearly three years whilst the levels have been extended, and considerable reserves of ore have been laid open. The returns may now be increased, and very good profits are expected to be made in the current year. The price of shares has taken a start from 10*l.* to 20*l.*, and may be doubled again any day.

MIXING IN IRELAND.—Assay of copper gossan from the back of a lode in the county of Mayo, taken from a sample of stuff obtained 4 ft. from the surface, on the east beach of a mountain rising 2750 feet, the lode 8 feet wide:—No. 1, 6½ per cent. copper; No. 2, 6 per cent. copper; 5 ozs. silver per ton; the copper contained in the samples was worth 5s. extra for silver. This is another corroborative proof of the richness of Ireland's copper produce. The assay was made by Messrs. Bath and Sons, of Swansea, to whom the copper ore will be consigned for sale.

DRAKE WALLS, AND WEST DRAKE WALLS.—When at intervals, few and far between, such splendid discoveries are made as that now developing at Prince of Wales, people naturally begin to look around, to ascertain what other properties contain the run of the local gold. It is a most important fact, that the Prince of Wales and West Drake Walls are the only ones of the kind in these rich lodes direct from the Prince of Wales sett for 1000 fathoms, or over one mile in length. These lodes would, of course, not have been left idle had their great value been dreamt of. It seems that all holders of Drake Walls would be entitled to an additional share of the West Drake Wall share, and that the latter, in fact, is a cross-cut, greatly added to the value of Drake Walls. The Prince of Wales lodes can be intersected by cross-cuts from the present levels in Drake Walls at about 50 fms. distance, in new and most interesting ground, and

under advantageous circumstances as regards cost, &c., which a miner will readily appreciate. This fine discovery will give a fresh impetus to mining.

SOUTH HERODSFoot.—The engine-shaft is down to the 85 fm. level, and driving to Inter-sect the lode has been commenced. The stratum is a beautiful blue killas, and it is expected the lode will be met with in about 4 fathoms driving. The agent is very sanguine of meeting with a productive lode. Sharps should be looked after, for, if lead be met with, they will have a great rise.

PROSPER UNITED.—These mines continue to progress most favourably, and there is little doubt but that they will prove this by results in a more marked manner than in the case of any other mine in Cornwall during the current year.

GREAT RETALLACK.—Since the mine meeting the lode in the adit level north and south has very much improved in size and appearance, being the bigness of the level in each end. The lode in the slope in back of the level has also much improved, being worth 15 cwt. of lead per fm.

PRINCE OF WALES.—As the development of this property progresses the most favourable results are being realised. The course of ore gone over in the 45 fm. level, east and west of the shaft, is worth from 20l. to 35s. per fathom, the end at present being worth 20l. to 25s. per fm. The 45 fathom level, west is at present worth 6l. to 8s. per fm., with every prospect of improvement. The stops in the back of the 45 fm. level east are worth 20l. to 25s. per fm., and the 45 fathom level, east is at present worth 20l. to 25s. per fm. The 45 fathom level, east is at present worth 20l. to 25s. per fm. During the week the level has been cut at the 65 fm. level 6 ft. wide, worth, so far as seen, about 45s. to 55s. per fm. It should be remembered that in the 45 fm. level east, when driving was commenced from the cross-cut, the lode gradually improved. The 55 fm. level is considerably richer than in the level above at the point where driving was commenced eastward. An inspecting agent says that it should not be at all surprised if the lode should be worth 40s. to 50s. per fm. at the 55 fm. level.

A company has been formed for the purpose of working an extensive piece of mineral ground adjoining the Great Retallack Mine. The sett is fully 100 ft. in length, and is bounded on the east by the London and Glasgow rail and canal, and on the west by the London and Glasgow road. The two lead lodes lately discovered in Great Retallack Mine are running directly into the ground where they will form a junction, and at which point it is not improbable an important discovery will be made. In addition to these lodes there is another lode, to the west of which a large quantity of silver ore has been raised. An adit level can be brought up at a small expense to prove the lodes nearly 25 fms. from surface. The mine, which is called the NORTH RETALLACK, is in 1024 shares, and under the same management as Great Retallack.

DRAKE WALLS.—Shareholders in this mine should not lose sight of the fact that the lodes in the Prince of Wales Mine pass through their property, and that they have been already discovered at surface, where they present most favourable indications.

EAST WHEEL LOVELL. The advance in the price of tin is of considerable benefit to all the mines, but particularly this mine, selling, as it does, large quantities of that metal. It is opening out extremely well, especially on the south lode below the 40'. The western end of the shaft has much improved; indeed, the position and prospects of the mine are such as to induce the agent to state in this week's report that he has never seen the mine look so valuable. In his previous report (a fortnight since) he valued the different points of operation at 2000, per fm.

SPECIAL REPORTS OF PROSPER UNITED MINES AND
GREAT NORTH DOWNS.

BY CAPT. JOHN JAMES

PROSPER UNITED.—Cambridge, Jan. 24: There are three engine-shafts in this mine. The east, or Hosking's, is sunk to the 80, but has not been sunk for some considerable time past. The 50 is driving east of shaft in lode 1 ft. wide, worth 57. per fathom for tin. The 70 is driving east of shaft in a lode 4 feet wide, worth for tin and copper 107. per fathom. The 60, east of shaft, has been driven for some time by the side of the lode, which is now being opened on, and producing good stones of ore. These levels are opening a quantity of tin ground that will pay to work at an advanced price for tin. They are also approaching a large lode on course, and when reached it is intended to drive south on 16, to cut what is called Hosking's lode, which has been worked for some time past. It is probably the same as the extreme end workings of the 40, as there is a good run of ore ground below the 50, there being a long tank full of water in the bottom of the level, which will be drained when the level is intersected below. Louisa's, or middle engine-shaft, is sunk to the 90, and suspended, with but little doing near it. Hand's, or western engine-shaft, 100 fms. west of Louisa's, is in course of sinking below the 90, now down 6 feet; lode large, 2 feet of which is producing good stones of copper ore, and kindly to improve. In the 90, driving west of this shaft, the lode is very large, worth 127. to 151. per fathom for tin, with stones of copper ore: this end is closely approaching the 70, and the 60, and it is probable that the extreme end workings of Hand's shaft, is worth about 67. per fathom for tin. There is a wide lode below this level, 10 fms. behind the end, and 5 fms. in advance of the 90, sunk 5 fms., in a lode producing $\frac{2}{3}$ tons of copper ore per fathom. The 70, west of Hand's shaft, is poor, but there is a good lode in the bottom of the 60, a little beyond this point, and an improvement may be expected shortly. In the 60 end, west of Hand's shaft, and about 15 fms. west of cross-cut to the new shaft, the lode is 20 in. wide, producing 1 ton of ore per fathom. The new shaft is sunk below the 30 fms. level 5 fms. perpendicular between two lodes, and is now in course of driving to the 40. The lode on the north side of the new shaft, in a good lode, producing $\frac{3}{4}$ tons of copper ore per fathom; in the present end, the lode is 20 in. wide. A cross-cut is in course of driving north, opposite the new shaft, in this level, to intersect two lodes, one of which is the lode that produced large quantities of ore under the elvan course; I consider this a very important speculation. The 80, west of Hand's shaft, seems to have passed through a run of ore ground 40 fms. long, and there is also another run of copper ore ground about the new shaft 30 fms. long, which seems to speak well for the deeper levels. There are several stops, producing from 1 to 4 tons of copper ore per fathom, besides a quantity of tin stone. The principal part of the copper ore yet discovered in this mine is dipping fast west on the elvan course, and the lode below seems to be more promising for tin than copper. There is probably ground open that may be called reserves of copper ore that will last about eight months at the present rate of sampling 400 tons per month; also any amount of tin ground that might pay at a high price for tin—say 707. per ton—and a considerable quantity that will pay to stamp at the present price. About 4 tons per week are being returned which will, no doubt, be continued. The water charges are very high. There are three pumping-engines, with heavy pitwork, working at an average rate of 7 to 8 strokes per minute, and alone lift a quantity of not less than 5000. per day, or at least 4000. per month. It is humanly impossible to work this mine for some time hence, without any new machinery, will probably be about 20000. per month. This at the present rate of returns, and present price for mineral, will leave about 4000. per month profit, but considering that the reserves of copper ore are not very large, and the ore dipping so fast west, I do not think that to work the mine properly much profit can yet be calculated on, and, further, there is required at once a new winding-engine for the westward part of the mine. I should also say that the best of the ore ground is closely approaching the western boundary of the sett, but it is all but certain that a new lode will be discovered, and that there will be a large quantity of tin to be worked with energy, and there are several speculative points of operation which probably lead to good discoveries. The average produce of Prosper United ore is 6 per cent.

GREAT NORTH DOWNS.—Camborne, Jan. 24: Sleggan's, or engine shaft, is sunk 9 fms. below the 70; in this shaft there is a splendid-looking lode very large. The ore part being carried in sinking is 4 to 6 ft. wide, worth quite 60*l.* per fathom. The other part contains good work for tin. King's shaft is down to the 86, there is a little water and stuff in the bottom, but from what can be seen in the ends of the shaft there is a kindly ore lode, with a prospect of improvement. The 86 is driven west of King's shaft about 7 fms.; there is also some water and stuff in this end. I was, however, in it, and find there is a large quantity of good working ore; when a little has been done in it the value will be more particular and ascertainable. The 86 is driven west of King's shaft about 7 fms. The water will, no doubt, leave this entirely in a day or two per fathom. No. 1 winze, between Sleggan's and King's shafts, is sunk 7 fms. below the 70 fms. level; lode greatly improved in the last day or two, now worth 10*l.* per fathom. No. 2 winze, below the 70, west of Sleggan's shaft, is down 7 fms.; lode large and worth 15*l.* per fathom. No. 3 winze, further west, below the same level, is down 6 feet, worth 12*l.* per fathom. In the 102, driving west of Sleggan's shaft, there is a good lode worth about 14*l.* per fathom; this is about 72 fms. below the shaft. On the north side of the 102, 6 fms. from the bottom, the 70 is being driven towards Butler's shaft, in a lode 2½ ft. wide, producing good ore. The water flowing from this end contains a large portion of copper in solution, which is a strong indication of a large course of ore not far distant; consider this an important point. Butler's shaft is 136 fms. west of Sleggan's and was sunk by the former workers to the 47, and nearly all the lode taken away to this depth; below this it is in two parts, and seems to form what is termed the North and Sleggan's lodes, about this shaft. The shaft is sunk of the north side to the 69, and about 15 fms. below the bottom; here the cross-cut is a course of driving towards the south lode, having about 15 fms. more to drive to intersect it. Judging from the fine-looking lode in the 70 and west, referred to above, a good discovery may be expected here. The water charges, or entire cost of working the pumping-engine, is now about 80*l.* per month, but will be less in the summer. The whole working cost of the mine for some months to come will probably be 500*l.* to 550*l.* per month; this will enable the different points referred to be carried on with vigour, and looking to the fact that Sleggan's shaft is about 100 fms. from the surface, and the 70 together with the rich quality of the ore (that in Sleggan's shaft is upwards of 100 fms. from the surface), and the fact that the 70 is a lode of copper of no ordinary character. In fact, there is every probability that a short time will suffice to open up a good and profitable mine. The engine and pitwork at Sleggan's shaft seem of ample power to go a great depth, and there is a large pumping-engine, steam-whim, and valuable pitwork in the western mine which is not required

Dead.—On January 6, at his residence, Mount Hawke, St. Agnes Cornwall, aged 50, Capt. JOHN TONKIN, late of Chacewater. Capt. Tonkin was well known in the mining world, by his connection with the gold mines of Brazil, the malachite mines of Loando, West Africa, as well as by his extensive experience in home mining pursuits, his last engagement being as chief agent of the Wheel, Eilen United Mines, in which undertaking he was also a large adventurer. Capt. Tonkin's opinion was much valued and acted on. His social habits and kind disposition endeared him to a numerous circle of acquaintances, having generally been realised when carried out with interest. His sociability embracing every grade of society. He died respected wherever he was known and has left a name his family may well deem a solace in their irreparable loss. His funeral was attended by a large assemblage.

HOLLOWAY'S PILLS—STRONG AND HEARTY.—Every wise man aims at attaining health at any price, but, unfortunately, rarely thinks about it till it is going, or gone. Holloway's pills are so high in public estimation for purifying the blood, promoting the appetite, and assisting the necessary to do more than name them as the surest and simplest means of retaining or regaining robust health and corresponding strength. They act as purifiers, tonics, alteratives, and aperients, and they exercise over every organ the most wholesome influence, by supplying it with the purest blood, and regulating the quality and quantity of every secretion. The most timid and delicate invalid will derive from Holloway's pills vigour and comfort.

BRITISH MINES.

EAST ROSEWARNE.—J. James, Jan. 24: In the 95, east of King's shaft, the

GWYDYR PARK.—W. Smyth, Jan. 22: In Gwyn Llifon north end the lode still large, and the ground hard and slow for progress. We are still driving e end into the footwall, where the ground does not seem quite so hard as it is the lode. The lode in the west end is still disordered.

HALLENBEAGLE.—Wm. Bawden, Jan. 19: Pinner's Engine-shaft: The

PENHALLS.—Wm Bennett, W. Higgins, Jan. 18: The two bottom ends are such as for some weeks past; a little tin in the west end, but not enough to value. The 50, west on the new lode, continues to open out good paying ground, the lode in the present end being somewhat better than last reported. The winze between the 40 and 50 ft. levels is holed, and the ventilation produced thereby excellent. The other points of operation are without any change to notice. The frost and snow during the week have prevented us from dressing the whole of the tin in readiness for sale to-morrow; we shall, however, send on from 7 to 8 tons of the best quality.

PRINCE OF WALES.—J. Gifford, W. Gifford, Jan. 21: In the 55 cross-cut south, the lode is cut into 4 ft., but not through it. So far as seen it is worth 300 lb. per fathom, and daily improving—a splendid lode. In the 45 east we are dressing the lode, which we shall take down in the latter part of this week; it is worth 200 lb. per fathom.

that of October and a great advance made towards the erection of the remaining 15 leads of the Victoria stamps.

ST. JOHN DEL REY MINING COMPANY (Limited).—Advices received Jan. 22, via Bordeaux, ex steamer *Estramadure*; Morro Velho, Dec. 17.—**COST AND PROFIT.**—The produce for November being, 57,343 oits.
Deduct loss in melting into bars 219 oits=57,315 oits.
Which, at 78. 9d. per oita, amounts to £22,176 6 8
Cost—Labour.....Rs. 58,841 \$971 102,161 \$112 exchange 24½ d. 10,566 6 3
Other charges Rs. 43,649 \$411

Profit for the month of November.....£11,694 9 7

FERNAM PAKES ESTABLISHMENT.—Gala Mine cost, Rs. 2913 \$882, ex- change 24½ d. £3909 9 9

Although the prices in some articles of provisions—such as pork, rice, and Indian corn—have been high, yet the outlay, both for provisions, materials, and labour, has been less than during the month of October, and the profit shown on the working for the month is the largest ever obtained in the month of November.

VAL ANTIGORIA (Gold).—Jan. 12: The stope in bottom of the adit level on No. 1, has greatly improved in width within this last week, and the ore coming from this point will give 1 oz. of gold per ton of ore. The lode in the winze sinking under the 16 in this lode continues 8 in. wide, of average ore. In the 20 ft. level end, driving south from main shaft, the lode is 1 foot wide, of auriferous ore. In the 10 ft. level on No 2 we find it necessary to further secure the western side of the level in the old workings, which has retarded our prosecution of this level, but I hope to get it secured in three or four days, when we shall resume the digging down. After a long driving south through the alluvial soil, we have reached the rock, and are now about to reach the lode, when we hope to have the pleasure to report an important discovery.

—Jan. 14: We remit this day to the office 51 ozs. of fine gold from these mines of the estimated value of 264l., obtained chiefly from the workings of the two new mills, which continue to give satisfaction.

VALLANZASCA (Gold).—Jan. 16: For the purpose of closing the remittances for 1866 we forward 125 ozs. of gold, obtained by the new mills in 19 full working days. Since our last remittance the frost has been very severe; the ice on the wheel and in the water has made the amalgamation of the ore defective, and the yield consequently small, although the average contents of the ore in ground is still the same true price. The continuing duration being now necessarily suspended, we are changing some of the mill beds and grinders, and shall in a few days commence the construction of a new permanent bridge over the Anza, in place of the one carried away by the last flood. As soon as the weather will permit we shall resume the amalgamation. At the mines the lodes in the several stopes continue their usual width, and are calculated to yield large quantities of ore. We are laying a branch tramroad in Cayra Vecchia lode large quantities of good ore; also opening up the Placer de San Juan tramroad.

PESTARENA.—T. Roberts, T. Werno, Jan. 14. We remit to the office this day two ingots of fine gold, about 165 ozs., obtained from only 64 tons of ore, the Aquavite ore being an average of about 2 ozs. 11 dwts. 13 grs. of gold per ton. Since our last remittance, owing to the severe frost, we have only been able to work ¾ full days, calculating the whole number of 280 native mills. This produce is altogether the best result obtained so far from these mines. The total remittance of gold from April to December has been 2972 ozs., realising 9664l., and the average yield of all the ore treated over 2 ozs. of gold per ton.—Mines: We are pleased to report that the engine-shaft of the Pestahera Mine will sink without doubt, the bottom continues to be very regular, yielding 9 tons of ore per fathom, worth over 2 ozs. of gold per ton. After this shaft is completed we shall commence from a new stope, where we shall raise large supplies of ore that will yield 2 ozs. of gold per ton. In the Aquavite Mine we have an improvement in the stopes in back of the bottom level, towards the Pestahera Mine; at this point the lode yields on an average 12 tons of ore per fathom, worth full 2½ ozs. of gold per ton. The stopes in bottom of the next level above are yielding 10 tons of ore per fathom, worth 2 ozs. 5 dwts. of gold per ton. Below the bottom of the engine-shaft are yielding also more worth 1 oz. of gold per ton.

VAL TOPPA.—William Jenkins, T. Roberts, Jan. 14: Piedimuliera: The exceedingly cold weather has since our last remittance, in December, obliged us to suspend almost entirely the working of the native mills, and has somewhat interfered with the effective working of the 10 new mills, the icy water in the new mills making the amalgamation of the ore imperfect. We are, however, now clearing up several openings of the establishment, which we calculate will, with the aid of a stone or two, keep the interior of the mill apartment free from ice, when the amalgamation can, without doubt, be resumed. During the winter, in erection of the new native mills progressing, and we hope to have them at work by the end of March. Since our last remittance, in December, 115 tons of average ore have been treated in the 10 new mills in 20 full working days, the remittance made this day being 100 ozs. of fine gold. At the mine the lode in the end of Marmo Rosso is 5 feet wide. The lode in the stopes in the back of this level is 7 feet wide, worth 1 oz. of gold per ton. The lode in the stopes in the back of Fisher's level is 11 feet wide. The stopes in the bottom of this level are 10 feet wide, where a large quantity of average ore has been extracted. During the winter the shafts sunk in the Marmo Rosso lode at a deep level, and so far as they also open up new ground on the lodes.

CAPE COPPER.—Cape Town, Dec. 18: At Ookiep no particular change had taken place in the mining operations. An engine-shaft was being sunk to thoroughly drain the mine. The water had continued to prevent further operations in the level driven east from the incline tunnel. The extraction for the month was 458 tons, the quantity carried away to the coast was 445 tons. The trials at Nabapeep and Koperberg had not met with any important results. The smelting-works had been delayed by an accident to the boiler of the blast-engine, but another boiler had been for some time in course of erection, and would be soon completed. The production of metal was not much better than the former months, and as soon as the engine is again in working order two will be kept at work. The results for the month were 17½ tons of metal and 9 tons of regulus. The *Ocean King* had discharged her outward cargo of coal, coke, &c., and nearly completed loading a cargo of 615 tons of ore. The *Glenelder* and *William Graham* had just arrived at Hondeklip. The present mail steamer has brought 150 tons of ore: 550 tons of ore at Swansea have been sold this month by private contract, at 15s. per unit.

SAN ROQUE.—Charles Renfry, Jan. 12: No. 3 level has been extended east of San Francisco engine-shaft 8 varas 0 ft. 6 in., in a productive lode. The water increases but little, and, consequently, the drift is not so violent. The level has been carried to the 2nd level. In the said shaft stope 10 varas below No. 2 level. In San Estevan shaft we have been able to sink another 4 varas 1 ft. 6 in., and hope to hole to No. 3 in the course of thimonth. The cross-cut in No. 3 level, driving to San Estevan shaft, has been driven 1 vara 2 ft. 9 in., (or say) to under the shaft. San Francisco engine-shaft has been deepened 2 varas 1 ft. 9 in., making a total depth of 16 varas 0 ft. 6 in. below No. 3 level. Owing to the breaking of the working-barrel of the sinking-lift we have not obtained the rate of sinking by 1 vara at least, though we should otherwise have sunk considerably deeper. The water in the bottom level, and again in sinking satisfactorily, but out of lode. No. 3 level, driving west of engine-shaft, has been driven 8 varas 2 ft. 6 in., the last 5 varas 2 ft. 6 in. being in a cross-course. After driving through about 3 ft. of cross-course, we cut a pretty strong stream of water, which still continues. No. 2 level, west of engine-shaft, has been advanced 9 varas 1 ft. 9 in., in a promising lode. In the present month the lode has gradually increased in size, and yesterday commenced to make ore: the lode to-day is 4 ft., and well defined, carrying on the north wall a string of ore in solid, and also a small vein of quartz, and set ground underneath. The lode has advanced 11 varas. The bar of unproductive ground mentioned in my last report only extended about 4 fms., when the lode again made ore, and now carries from 2 to 3 in. of galena. In the bottom of this level we have commenced and sunk a winze (El Gordito) 4 varas 1 foot. The lode contains about 4 in. of galena, and promises to increase in value 1 depth. Seeing the promising feature of this course of ground, we have now resumed the sinking of a former trial shaft.—San Luis (*vide* report for April, 1864). This shaft is situated about 88 fms. south of the San Francisco engine-shaft, and is sunk upon a level which has proved its stability will prove to be the same as the fourth lode. We have deepened the shaft 13 varas 1 ft. 3 in., there remaining another 3 varas to sink before commencing No. 1 level. The lode in this shaft is small, but promising, and no doubt will open out when we come to extend No. 1 level on the same. There remain about 55 varas to drive in order to communicate with the No. 1 level, driving west of engine-shaft. After this communication has been effected we shall have perfect ventilation, and, consequently, be able to open out this run of ground below No. 1 level with great rapidity. San Augustin shaft has begun to sink 10 ft. 6 in., and is about 10 ft. below the level of the lode is ore, and has taken a very strong underlie north. The produce of ore weighed into magazine for December amounts to 113 tons. My estimate in cost of bargains in leading workings and stopes, and produce obtained therefrom, for January, is as follows:—Produce, 9000 arrobas; cost, 36,750 rs.; men, 91, (or say) 31 men in shafts and winzes to sink 26¼ varas, 32 men in levels and cross-cuts to drive 52 varas, 22 men in stopes to spend 175 varas, and 6 m-en on tribute.

LUSITANIAN.—Jan. 15: At Taylor's shaft the lode is worth 2 tons per fathom. In the 60, west of Oak shaft, the lode is composed of flookan, quartz, and stones of ore. The lode in the 100, east of Taylor's, is worth 1 ton per fm. The lode in the 100 west is worth ½ ton per fathom. The lode in the 90, east of Taylor's, is composed of dry flookan and schist. In the 80, west of No. 61 winze, the lode is worth ½ ton per fathom. The lode in the adit, west of Perez' shaft, is producing 3 tons per fathom. The lode in the 70, east of the adit, is worth 1 ton per fathom. The lode in the 28 east is composed of quartz and stones of ore. The 50 cross-cut is of a hard gneiss. The ground in the 60 and 100 fm. level cross-cuts is a hard gneiss. The 80, east of Taylor's, is composed of quartz, flookan, and stones of ore.—Stopes: The lode in the stopes above the adit, west of Perez' shaft, is worth ½ ton per fathom. The lode in the stopes above the 18, west of Fonsaca's winze, is worth ¾ ton per fathom. The lode in the stopes above the 28, east and west of No. 58 winze, is worth ½ ton per fm. The lode in the stopes above the 40, west of Joaquin's winze, is worth ¾ ton per fm. The lode in the stopes above the 50, west of Ernest's winze, is worth 1 ton per fathom. The lode in the stopes above the 50, east of Taylor's shaft, is worth 2 tons per fathom. The lode in the stopes above the 90, west of Taylor's shaft, is worth 1½ ton per fathom. The lode in the stopes above the 50, east of Norte's winze, is worth ½ ton per fathom. The lode in the stopes above the 90, east of No. 61 winze, is worth 1 ton per fathom. The lode in the stopes above the 100, east of Taylor's shaft, is worth 1 ton per fathom. The lode in the stopes above the 100, west of No. 61 winze, is worth ¾ ton per fm. The lode in the stopes above the 80, west of No. 61 winze, is worth ¾ ton per fathom. The lode in the stopes above the 70, east of Travarra's winze, is worth 1 ton per fathom. The lode in the stopes above the 70, east of Campino's winze, is worth 1 ton per fathom. The lode in the stopes above the 60, west of Campino's winze, is worth 1 ton per fathom. The lode in the stopes above the 28, west of Mill lode, is worth ½ ton per fathom. The lode in the stopes above the 38, east of Taylor's, the lode is worth ¾ ton per fathom.—Cerro Valhal Mine: The lode in the 40, east of incline-shaft, is split into branches. In the 30, east of same shaft, the lode is composed of quartz, spots of lead, and munda. In the 30 west the lode is composed of munda and quartz. In the 20 west the lode contains quartz and munda. The 20 east is spotted with lead. In the 10

10 west the lode contains muddle and quartz, with gossan. The lode in the stopes above the 30, east of No. 3 winze, is worth 2 tons per fathom.—Figuredo Mine: The lode in the 20 metre level, east of Henty's shaft, is 4 ft. wide, being 3 ft. of flookan and 1 ft. of quartz; its bearing and underlie are very regular.

WEST CANADA.—W. Plummer, Dec. 15: Huron Copper Bay: The stopes west of new engine-shaft is worth 2 tons per fm., and the stopes on the east are yielding from 1½ to 2 tons.—Palmer's Shaft: The lode in this shaft has of late materially changed. In sinking under the 25 the lode for 6 fms. maintained its size and richness. We were sinking on the middle of a good lode without a wall on either hand. First we met with a wall on the north side, which underlied so fast that in sinking about 4 fms. the lode narrowed from 16 feet to 2½ ft.; recently it has got wider, but is without ore. The stopes on the east and west are unchanged, and yield from 3 to 4 tons per fm.—Bray's Shaft: The 30 west is poor; this is in the direction of Palmer's shaft. I have watched this point of late with great interest, and I am not yet without strong hope of an improvement. The lode going east is of much the same character. All the other points on Copper Bay are looking well.—Wellington: The lode at Grenfell's shaft is without change; the lode is wider, but does not carry ore enough to be of much value until the ground is opened out for stopes. The stopes on the west is worth about 1½ ton per fm., and on the west Crase's, east of Rowe's winze, the lode yields 1½ ton; on the west of ditto, 2 tons. The lode at Mitchell's is much the same, and yields from 1½ ton to 2 tons per fm. The stopes west of Rowe's yields 3 tons, and that on the east 2 tons per fm.; this point has improved of late. On the tin lode the stopes yield their usual supply of ore, and average about 1½ ton per fm.—Bruce Mines: The stopes on the east of Trial yield 2 tons per fm., on the west the lode is poor, and will not yield more than 1 ton per fm. The stopes at the engine-shaft yield 1½ ton per fm., and at Scott's the lode is of a similar character. The 50, east of Pincer's shaft, is still poor, and is not promising to improve. The lode at the new shaft (Taylor's) is unchanged, and good progress is being made.

TERRICCO COPPER (Tuscan).—Twelve tons of copper ore have in this month (January) shipped by the company at Leghorn for Liverpool.

GOLD MINING IN ITALY.—The directors of these mines have received the following parcels of gold for December:—From Pestarena, 165 ozs.; Vallanzasca, 125 ozs.; Val Toppa, 100 ozs.; and Val Antigorina, 51 ozs., making a total of 441 ozs. It appears from the reports of the manager (which appear in another column), that had it not been for the frost which prevailed during the month, the returns would have been the largest yet made. The Pestarena return of 165 ozs. was produced from 64 tons of ore, and by native mills working only nine and a-half full days. The average produce since April has been over 2 ozs. of gold per ton of ore.

GOLD MINING IN BRAZIL.—It is gratifying to find that the mines of the Don Pedro North del Rey Company continue to yield a satisfactory profit, the operations during November resulting in a profit of 1100%. The directors have announced that the dividend will not be less than 1s. 6d. per share, notwithstanding that the whole expenditure of the company has been charged against revenue. The mines of the Anglo-Brazilian Company have also been brought into a remunerative condition, the profit during November amounting to 244%.

EAST GUNSLAKE AND SOUTH BEDFORD CONSOLS.—The secretary (Mr. T. B. Laws) writes that the committee appointed to settle all questions in reference to the disputed boundary have succeeded in obtaining from His Grace the Duke of Bedford the piece of ground in which a valuable discovery of copper ores has been made, which tends considerably to enhance the value of the mine.

CALDBECK FIELDS.—Mr. Thomas Eyre Foakes has addressed a circular to the shareholders, in which he states that the report of the Committee of Investigation contains statements, with reference to himself, unfairly representing the facts. He could not let the opportunity pass without expressing his great regret that the conduct of the company's affairs should have passed into the hands of a body of local directors, who, from their past as well as their present conduct, afford, in the opinion of a very large body of the shareholders, but little ground for hoping that the mine will be opened out in a good and minelike manner. A great deal had been said, both by the Cumberland directors and also by the Cumberland shareholders, about the great expense which has been hitherto incurred in developing the mine, and they have sought to cast the blame of this expenditure on the London section of the board, altogether ignoring the fact that of the nine directors four of them—Sir Robert Briscoe (the Chairman), Mr. Banks, Dr. Coman, and Mr. Walker—reside in or near Cumberland, and that a fifth director (Mr. Hardie) resides at Manchester; and that if the Cumberland directors had really objected to the way in which the mine was worked, as being on too costly a scale, they could at any time have attended the board and protested against it; and if that protest was ineffectual they might have appealed to the shareholders. Then, too, the four Cumberland directors were appointed a committee to superintend the working details of the mine; and, according to Capt. Kitto, they exercised their functions in such a manner that it was impossible for the Captain to purchase even a second-hand cart without first consulting the local committee. Mr. Foakes then instanced the delay which took place on the part of Sir Robert Briscoe and Mr. Banks, who undertook to see the lessors, and endeavour to effect some arrangement with regard to the extension of the lease and a reduction in the dues, and states that, feeling the shareholders' money was being expended in developing the mine, and that at any moment some discovery might render any appeal to the lessors hopeless, he brought the matter before the board, with a view to his being allowed to see whether he could not bring matters to a close. Within about a fortnight from the time the matter was placed in his hands he had seen the lessors, and obtained their consent to extend the term to 50 years, and to reduce the dues from one-tenth to one-fifteenth, in consideration of the company's paying a fine of 3000l., and undertaking to expend a considerable sum of money in machinery in order to try the mine in depth. It has been said, on good authority, that this concession is worth to the company from 15,000l. to 20,000l., and he thinks it is, for the set includes several mines, and if the mine now works proves as valuable as report states it will, shortly a portion may be either underlet or sold for a very considerable sum. Mr. Foakes concludes by stating that "in the opinion of the most trustworthy and experienced among the mining capitalists the shareholders possess a property of very great value, but to realise this value the mine must be properly and efficiently worked, and to this end I hope the attention of the shareholders will be directed."

TALGARTH SLATE AND SLAB QUARRIES.—A company is being formed, with a capital of 40,000l., for the working of these quarries, which are situated in Merionethshire. The promoters are—Messrs. A. Milstead, Ranelagh-villa, Oakley-square; H. G. Plaskett, Eldon-square, Dalgely; Wm. H. Moore, Clarendon-road, Kensington; T. B. Diplock, Oakley-square; Walter Roberts, Alexandra-terrace, Plymouth; T. H. Walker, Wellington-square, Chelsea; W. Boggett, Lindsay-row, Chelsea; and G. C. Silk, the Vicarage, Kensington.

MINING AND ITS PROSPECTS.—(From Mr. Peter Watson's "Weekly Mining Circular and Share List," No. 408, Vol. IX.)—"Throughout the late severe panic, when the value of money was daily advancing, and that of stocks and securities declining in a correspondingly greater ratio, when every description of produce became a drug in the market, I was continually pointing out the impolicy of holders of shares in really bona fide enterprises, and more particularly in sound and well-conducted dividend and progressive mines, participating in the prevailing alarm, and of disposing of their interest at the then merely nominal quotations. I know full well that to discriminate between schemes founded upon a sound commercial or financial basis, and those which appeared to possess a superficial soundness, although containing within themselves the elements of their own inevitable destruction, was a difficulty severely felt by the general public; but those of my customers who pursued this 'circular' during the past year will now do me the justice to say that my fearless attacks upon most of the financial schemes which were then commanding an enormous premium in the market (to the extent of millions sterling) were not made without good and sufficient reason; for, unfortunately, since then my worst anticipations have been most painfully verified. As to the value of my advice, either as to the holding of shares in good mines, or to the sale of shares in what were most inappropriately termed 'Financial Companies,' I inchoate banks, &c., it is now too obvious to need further reference, for while the former are now commanding a gradually increasing market value, the latter have passed into the hands of mercenary official liquidators. I would not have it understood from these remarks that I am decrying the development of legitimate enterprise; on the contrary, that of necessity must progress concurrently with the development of our mineral resources, otherwise there must recur that absence of equiptment of supply and demand in metals which cannot fail to have its adverse effect upon the value of mine shares. There is, however, on every side unmistakable evidences of the expansion of commerce, which will stimulate enterprise, and improve the value of produce. It is for these reasons, combined with the fact that in several mines important improvements have recently taken place, that I am induced to still strongly recommend the immediate purchase of shares in mines, and more particularly those to which I have for the last few weeks directed special attention. It is true they have advanced (and in some cases materially) in market value, but it should at the same time be remembered that for some time past, from the causes above referred to, mine shares have been enormously and unduly depreciated; and therefore, although an improvement has taken place, the present market price (with a very few exceptions) is very far below their intrinsic value. Hence, investors should at once make their selection."

THE GENERAL EXCHANGE BANK (Limited).—An application was made to the Master of the Rolls on Wednesday, for the reconstruction of this Bank. It was proposed to sell the whole of the assets to the London and Exchange Bank (Limited), that bank giving its deposit notes to the creditors in payment of their debts. Mr. A. Pulbrook, on behalf of some shareholders, opposed the application, and asked his lordship to direct a meeting to be held. His lordship said he would intimate his opinion on Saturday.

LONDON OFFICES COMPANY (Limited).—His lordship the Master of the Rolls has appointed Mr. Henry Threlkeld Edwards and Mr. Wm. Farmer liquidators of this company. Mr. A. Pulbrook is the solicitor.

PREFERENCE SHARES AND ORDINARY SHARES.—It has been decided by Vice-Chancellor Kindersley, in the case of the winding-up of the Strathbryn Mining Company, that where preference shareholders were entitled to a preferential dividend they would take with the ordinary shareholders in a division of assets; but that where preferential shareholders were entitled to interest at a stipulated rate, and a share in the dividends as well, the interest must be paid first. The reason was that dividends could only be paid out of profits; whereas interest was a charge upon the working of the company, and had, therefore, priority of claim. In short, when money was borrowed from a shareholder, for which it was agreed to pay interest, such interest must be paid, whether profits were made or not.

The Master of the Rolls has appointed Mr. H. T. Edwards, King's Arms-yard, to be official liquidator of the Tavistock Ironworks and Steel Ordnance Company (Limited).

* * The TITLE-PAGE AND INDEX to the THIRTY-SIXTH VOLUME of the MINING JOURNAL is published, as a SUPPLEMENTAL SHEET, with this week's Journal. The Supplement also contains the conclusion of the Paper on the Development of the Iron Trade, read by Mr. Jas. Robertson at the London Association of Foremen Engineers; the Proceedings of the Society of Engineers; and the inaugural meeting of the Incorporated Association of Mine Agents of South Staffordshire and East Worcestershire.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JAN. 25, 1867.

COPPER.			IRON.		
Best selected.....	per ton	£ s. d.	Bars Welsh, in London	6	7 6-6 10 0
Tough cake and tile ..	86	0 0	Ditto, to arrive	6	10 0
Sheathing and sheets ..	91	0 0	Nail rods	7	0 8 0
Boils	93	0 0	.. Staffs, in London	7	15 0 8 10 0
Bottoms	96	0 0	Bars ditto	7	15 0 9 10 0
Old (Exchange)	77	0 0	Hoops ditto	8	15 0 9 15 0
Burra ditto	83	0 0	Sheets, single	9	10 0 11 0
Wire	0 1	0 1 0½	Pig No. 1, in Wales ..	4	5 0 4 10 0
Tubes	0 1	0	Refined metal, ditto ..	4	0 5 0 0
BRASS.			Bars, common ditto ..	5	10 0 6 0 0
Sheets	per lb.	10d.	Do. mch. Tynor Tees	6	10 0
Wire	9d.	—	Do., railway, in Wales	5	5 0 5 10 0
Tubes	11d.	—	Do., Swed. in London	10	5 0 10 10 0
SPELTTER.			Per ton.		
Yellow Metal Sheath, p. lb.	8½d.	—	To arrive	10	0 —
Sheets	8½d.	—	Pig No. 1, in Clyde ..	2	15 0 3 6 6
ZINC.			Do. f.o.b. Tynor Tees	2	9 —
In sheets	28	0 0	Do. Nos. 3, 4, f.o.b. do.	2	6 0 2 7 0
TIN.			Railway chairs	5	10 0 5 15 0
English blocks	90	0 0	.. spikes	11	0 0 12 0 0
Do., bars (in barrels) ..	91	0 0	Indian Charcoal Pigs.	7	0 0 7 10 0
Do., refined	93	0 0	In London p. ton ..	7	0 0 7 10 0
Banca	89	0 0	STEEL.		
Straits	86	0 0	Swed., in kegs (rolled) ..	14	0 0 14 10 0
TIN-PLATES.			.. (hammered)	16	0 0 16 10 0
IC Charcoal, 1st qua. 12	0 1	13 0	Ditto, in faggots	16	0 0 17 10 0
IX Ditto, 1st quality 18	0 1	19 0	English, spring	19	0 0 23 0 0
IC Ditto, 2d quality 14	0 1	14 0	QUICKSILVER (p. bottle)	6	17 0 7 0 0
IX Ditto, 2d quality 14	0 1	14 0	LEAD.		
IC Coke	4	6 1 6 0	English Pig, com.	20	0 0 —
IX Coke	1	10 6 12 0	Ditto, ordinary soft ..	20	5 0 20 10 0
Canada plates, p. ton ..	13	0 0	Ditto W.B.	22	15 0 —
Ditto, at works	12	0 0	Ditto, sheet	21	0 0 —
At the works, 1s. to 1s. 6d. per box less.			Ditto, red lead	21	10 0 —
			Ditto, white	37	0 0 30 0 0
			Ditto, patent shot ..	23	0 0 —
			Spanish	19	10 0 19 15 0

REMARKS.—The Metal Market has been rather quieter during the past week, and business has not been quite so active. The severe frost which we have had has very much interfered with commercial transactions; now, however, that it has broken up we may look for a resumption of the activity which was lately apparent. Matters continue to look healthy, and there is now every prospect of a good spring trade arising in metals. The continued easiness of the Money Market affords great facilities for entering into operations, and should a little more spirit be infused into the metal market no doubt we shall find that operators will be eager to avail themselves of the facilities thus afforded, and anxious to enter into transactions while prices are such as to promise a satisfactory result. From the intelligence received from America it appears that the impeachment of the President is not likely to be proceeded with during the present session of Congress, although it does not seem to be abandoned by the party opposed to the President. It will be very desirable to see that affairs in the United States are in a more settled state, and that our former very satisfactory commercial relations are again resumed, which we can hardly expect will be the case while matters remain in their present condition. A little more business is now doing with India than has lately taken place, though still it is very far from returning to its former active and favourable position.

COPPER.—The market for this metal has continued in a very inactive condition during the week; the uncertainty as to what effect the late break up of the Association may have upon the market has, doubtless, had considerable influence; but we may expect that this will soon be removed, and that it will eventually be found that great advantages will result from the destruction of the monopoly. Business has been done in Wallaroo at 84l. 10s. cash.

IRON.—In Staffordshire a few orders have been given out during the week for the various kinds of merchant iron, but so far, the reduction of prices has given but slight stimulus to the demand. The notices of the reduction of wages at some of the ironworks expired on Saturday, and meetings of the men in the various districts have been held to consider the course to be pursued; nothing, however, seems to be finally decided, but the impression is very general that there will be no strike. In Welsh the trade continues dull, and the slight feeling of confidence evinced after the quarterly meetings has not made the progress expected. The complete stoppage of enterprise by the effects of last year's panic has caused a serious decrease in the home demand, and consumers show but little disposition to purchase, except to meet immediate requirements. American engagements have been the chief support of several of the leading works for some weeks past, and there are indications that the enquiry from that quarter is likely to increase. Large shipments of rails are now made direct to the Southern States, instead of to New York, as was formerly the case. From Russia a brisk spring demand is looked forward to for railway iron, in order to complete the lines already commenced. No steps have yet been taken by the ironmasters to reduce wages, and it is hoped by the men that the requirements of buyers will so increase as to render it unnecessary to carry out the reduction. In Swedish iron a very fair business is doing, and the demand is still improving. In Scotch pig-iron the market has tended downwards, and the amount of business transacted has been but small. The price declined to 54s. 3d. cash, and afterwards to 53s. 9d. cash, which is the last price received from Glasgow.

LEAD.—A moderate business only is doing, the market generally remaining quiet; price, however, is unaltered.

TIN.—The market for foreign has been by no means so active as it was last week, and although prices are not very much altered, yet there appears less inclination to do business. Transactions still occur in Straits at 86l. 10s., cash, for small lots, but there are sellers of larger parcels at 86l. A small parcel of Banca has been sold at 89l. cash.

SPELTTER.—No great activity has been evinced in this metal during the week; business has been done at 22l. for the middle of February, and at 22l. 5s. for the middle of March, and parcels on the spot are held for 22l.

TIN-PLATES.—There is a better sale since the quarterly meeting, but the list prices are not obtained.

STEEL AND QUICKSILVER without change.

As far as general business is concerned, there has not been so much doing in the MINING SHARE MARKET since our last; but in two or three prominent mines very heavy transactions have taken place, and consequently at greatly advanced prices. We referred last week to one or two mines that had been neglected for some months, and had all at once sprung into notice; and, among these, Redmoor shares have risen from 6d. to 10s. 6d., and likely to go much higher as the cross-cut towards the lode proceeds. The standard for ore declined about 1l. on Thursday.

The mines mostly dealt in this week have been Prince of Wales, Drake Walls, Redmoor, West Chiverton, Great Retallack, Chiverton Moor, North Crofty, East Carn Brea, East Caradon, East Russell, West Seton, Wheel Buller, Wheel Uny, and a few others. West Chiverton shares have advanced to 62½d. Prince of Wales shares advanced to 38s., 40s., and leave off, owing to market operations, 34s. 6d. to 36s. 6d. The lode in the 55 has been cut into 6 ft.; a splendid course of ore, worth 35l. per fm., but not yet through it. The stopes above the 45 is still worth 20l. per fm. Wheel Buller shares advanced suddenly from 24 to 28, but declined again after the result of the meeting and the non-division of the sett was made known, and leave off 24 to 26; the accounts showed a loss of 68l. 3s. 5d. in two months, and a balance against the adventurers of 686l. 8s.; no

call made. The report states that the 92, driving west of Stevens's, is producing tin, and there are 12 fms. to drive to get under a bunch of tin gone down in the bottom of the levels over it, worth 30l. per fathom. The 80 west is worth 25l.; the stopes in back, 20l.; the 80 east, 30l.; and the winze under the 80, 50l. There are 51 men at work on tutwork, and 60 on tribute. It was resolved that the flat-rods be immediately put in order and erected, to draw the water from the 90 at Kistle's shaft; and when the 90 is drained that cross-cuts be driven to intersect the tin lode, and the account meeting in May be made special to consider the subject of erecting a new engine and dividing the sett.

Devon Great Consols, 415 to 425; a dividend of 64 per share (6144l.) was declared to-day, from profits on two months, and after payment of dividend, there remains a balance in hand of 16,358l. 8s. Bryn Gwiog, 20 to 22½; Carn Camborne, 22s. 6d. to 25s.; Chiverton Moor, 6 to 6½. Redmoor shares have advanced to 10s., 12s.; the cross-cut towards the lode in the 62 has been commenced in mineralised ground. Great Retallack shares have been very largely dealt in, and leave off 45s. to 47s. 6d.; at the meeting the accounts showed a balance of 375l. 17s. against the company, and a call of 3s. per share was made. The report of the mine is very satisfactory indeed, and it bids fair to make a very profitable one in a short time. Since the meeting the lode in the adit end north and south has much improved in size and appearance, being now the bigness of the level. The stopes in the back has improved, worth 15 cwt. of lead per fathom. Chon-tales, 2½ to 2½; Clifford Amalgamated, 8 to 8½; Cook's Kitchen, 10 to 11; East Basset, 23 to 25; East Carn Brea, 3½ to 3½. East Russell 3 to 3½; a call of 2s. 6d. per share was made at the meeting. East Gunslake and South Bedford Consols shares have advanced to 15s., and in fair request. We are glad to hear that the difficulty between the company and the lord has been arranged, by His Grace the Duke of Bedford having granted the piece of ground in dispute to the East Gunslake and South Bedford Consols adventurers. In this ground a valuable discovery of copper ore has been made, and it very materially improves the position of the company. East Grenville, 2 to 2½.

East Caradon, 5½ to 6; at the meeting the accounts showed a balance of 2339l. 2s. 5d., after payment of dividend of 614l. 8s. (2s. per share). Williams's shaft is down 11 fms. below the 100, and when completed to the 115 a cross-cut will be extended to cut the lodes, and it is expected the caunter and south lode will form a junction. This is a good point in the mine. The various ends on the caunter are looking better than they did three months ago, and a further rise in the standard will enable good dividends to be paid. Great Wheal Vor, 17 to 18; Marke Valley, 4 to 4½; New Seton, 3½ to 3½; North Crofty, 5½ to 5½; North Treskerly, 2½ to 2½; Prosper United, 3½ to 3½; Providence Mines, 27½ to 30; Rosewall Hill and Ransom United, 25s. to 30s.; South Condour, 15s. to 17s. 6d.; South Frances, 18 to 20; South Grenville, 6s. to 8s. East Lovell, 10½ to 11; the mine continues to look well, especially on the south lode below the 40. The western end of this shaft is much improved, where there is a magnificent lode. St. Ives Consols, 8 to 9; Tincroft, 14½ to 15; West Caradon, 11½ to 12½; West Frances, 16 to 17; West Seton, 12½ to 130; Wheal Chiverton, 9 to 9½; Wheal Grenville, 22s. to 24s.; Wheal Mary Ann, 12 to 14; Wheal Seton, 120 to 125; Wheal Tre-lawny, 11 to 12; Wheal Uny, 2 to 2½; Gumbler and St. Aubyn, 5 to 6; Great Laxey, 16½ to 17½; Great South Tolgus, 17s. 6d. to 20s.

The Market for Mining Shares on the Stock Exchange has during the week been very active. West Chiverton shares have been largely dealt in, and close 64½ to 65½; the prospects of the mine are reported as better than at any period of its history. The lode in the 100 continues to improve, and the courses of ore in the 80 and 90 west have lengthened greatly from those passed through in the upper levels. The recent severe weather has interfered with the dressing operations, but not with the underground workings, and the accounts to be presented at the next meeting will not be thereby affected. Increased dividends must ere long be paid. Chiverton, 8½ to 9½; the 100 has been communicated with Cookney's shaft, and a good course of ore has been passed through. The lode in Cookney's shaft has also improved, and the returns may be expected to be increased. Chiverton Moor, 6½ to 6½; the lode in the 50, west of flat-rof shaft, is worth 20l. per fathom, and the 50, west of engine-shaft, has improved. Westminster, 5 to 5½; there is a good course of ore in the eastern mine, and rapid progress is being made in the erection of the machinery in the western mine, which when completed profits from returns may confidently be relied on. Drake Walls shares have risen to 25s., 27s. 6d. Prince of Wales, 24s. to 26s. Seton shares are better at 125 to 130. Wheal Vor steady at 17½ to 18½. Great Laxey shares are flatter, at 16 to 17. North Crofty shares maintain the recent rise, and close 5½ to 5½, and the mine is favourably reported on. Devon Great Consols, 420 to 430. In Foreign Mines there has been less activity, with the exception of St. John del Rey shares, which close 53½ to 54½. Don Pedro, ¼ to 1 prem. Pestarena, 1½ to 2. Chontales fell to ½ dis., but close ½ to ¼ dis. Port Phillip, ¼ to 1; Yudanamutana, 1½ to 1½. Changes otherwise are unimportant.

IRISH MINE SHARE MARKET.—Since our last, of the 12th inst., Caryfort Mining Company's shares have suddenly jumped up from 2s. 6d. to 4s., and are now readily taken at a further advance of 1s. 6d., or 5s. per share. From Connore Mines (also in the Vale of Avoco), there is information from the officials of the discovery of a new sulphur lode, which has caused these shares to rise from 16s. 6d. to 18s. 6d. As we have many speculators who hold shares in all our leading mines, an unexpected attraction of special attention, such as above quoted, has generally a tendency to check their purchases in the quieter channels, and thus the full-priced shares of the Wicklow Copper Company and the Mining Company of Ireland have slightly declined—the former, Wicklow Coppers, 2l. 10s. paid, from 24l. 5s. to 24l. 2s. 6d., and the latter (7l. paid) from 18l. 17s. 6d. and 19l. to 18l. 15s., ex div. On the whole, the mining share market has been tolerably well supported, particularly when compared with the dealings in other securities.

A Cost-book company, divided into 600 shares, upon which 5s. is to be paid on application and 5s. on allotment, has been formed for working the SOUTH FOWEY CONSOLS COPPER MINE: further calls will be made as required. The sett extends nearly a mile from east to west, and half a mile from north to south, having on the south-west part Consols, and on the north-east Fowey Consols, which mines have been two of the most productive in Cornwall, having yielded upwards of 3,000,000l. sterling in copper and tin, and given more than 400,000l. profit. The reports appended to the prospectus, which will be found in another column of this day's Journal, are unusually strong, as might indeed have been expected, considering the position of the property, embracing those of Capt. Peter Clymo, J. Petherick, Francis Puckey, and Charles Thomas and Son; but it will suffice to allude to Capt. Peter Clymo's alone, in which it is stated that he has been one of the principal agents of Fowey Consols for eighteen years, that the South Fowey ground adjoins, that he knows the whole sett well, and that there are several very promising lodes contained in it that are well worthy of vigorous development; if that be done he believes the parties will be well remunerated for their outlay. The lease is for twenty-one years, at dues from 1-18th to 1-16th; and, by a mutual arrangement to be entered into with Fowey Consols, the entire South Fowey mines will be got into full working order at once, without the delay usually attending as a necessity upon the earlier development of mining enterprise. The whole of the projected arrangements and the machinery and advantages to be acquired are carefully detailed in the prospectus.

Of all efforts that have been made to carry the principles of co-operation amongst the middle and upper classes of society, the most successful have been those of the JOINT-STOCK COAL COMPANY (Limited). This company, at its formation, in 1864, commenced with a small capital, upon the expectation of paying a good dividend to its shareholders as investors, and also at the same time paying special advantages to its shareholding purchasers by the way of a bonus upon their coal consumed. As the result of its first year's operations the company paid a dividend of 10 per cent., and returned to its consuming shareholders 2s. 6d. upon each ton of coal they had purchased. The advantages thus obtained will be best seen by the following illustration:—A B has 10 shares in the company, upon which he has paid 5l., and on the shares he would receive 10s. dividend, but, supposing he has also consumed 12 tons of coal during the year, upon

these he would receive a bonus of 30s., so that in reality he obtains 40s. dividend upon his 5s. investment. It was, by some, thought that this state of things was too good to last, but the close of the second year's working shows results equally satisfactory, with the promise, now that the company is fairly established, of even greater success in future years. We are not surprised with such realisation that the first capital of 50,000 shares was quickly subscribed, and that the second 50,000 shares are being rapidly allotted; and we do not wonder at it, as surely every consumer of coal must feel it to be his interest to take shares in so profitable and safe an investment.

At Redruth Ticketing, on Thursday, 1873 tons of ore were sold, realising 11,161. 16s. 6d. The particulars of the sale were:—Average standard, 1047. 17s.; average produce, 84; average price per ton, 57. 19s.; quantity of fine copper, 155 tons 12 cwt. The following are the particulars of the sales during the past month:—

Compared with last week's sale, the decline has been in the standard 17. 5s., and in the price per ton of ore about 1s. 9d. Compared with the corresponding sale of last month, the advance has been in the standard 57. 15s., and in the price per ton of ore about 8s.

At the Swansea Ticketing, on Tuesday, 2064 tons of ore were sold, realising 23,164. 12s. 6d. The particulars of the sale were:—Average standard, 977. 16s. 9d.; average produce, 15; average price per ton, 11. 4s. 6d.; quantity of fine copper, 309 tons 12 cwt. The following are the particulars of the two last sales:—

Compared with the last sale the advance has been in the standard 17. 10s., and in the price per ton of ore about 27. 12s. 6d. There will be no sale on Feb. 12.

The directors of the Devonshire Great Consolidated Copper Mining Company at their board meeting, held yesterday, declared a dividend of 6144. being 6s. per share, arising from profits on sales of copper ores sampled in the months of September and October last. After payment of the same there remains in hand a balance of 16,358. 8s. in cash, ore bills not at maturity, and reserve fund applicable to the general purposes of the company.

At West Basset Mine meeting, on Wednesday, the accounts showed —Balance carried over from last meeting, 3731. 16s. 2d.; copper ores sold, 1301. 13s. 11d.; stores sold, 11. 10s.; tin sold, 2331. 19s. 6d.; advance on tribute received, 2201. 2s. 8d.; 2541. 2s. 7d. Costs, Oct. and Nov., 1773. 1s. 9d.; royalty, 1241. 2s. 8d.; advance on tribute, 2501.; boundary costs, 3511. 1s. 8d.; bankers' commission and sundries, 321. 17s. 2d.; 2541. 2s. 7d. A letter was read from Mr. Finch, the solicitor, informing the meeting that the bill in Chancery against the South Frances Adventure and Mr. John F. Basset, the lessor, was filed on the 14th, and on the same day copies sent to the agent at Truro, with instructions to see the solicitors for the defendants, and procure their acceptance of service.

At Cargill Mine meeting, on Tuesday, the accounts for the three months ending September showed a credit balance of 7331. 13s. 10d. Captains Grose and Tysser reported upon the various points of operation.

At Bryn Gwiof Mine meeting, on Wednesday (Mr. B. Seward in the chair), the accounts for the three months ending December showed a credit balance of 321. 13s. 4d. Capt. Stephen Harper reported that they have 86 men employed underground, and 44 men and boys at surface. At present, in consequence of the severe frost and snow, their surface operations are very limited, particularly in the dressing department.

At Wheal Buller meeting, on Wednesday, the accounts for November and December showed a debit balance of 681. 8s. 4d., and a loss on the two months of 681. 8s. 4d. Capt. James Inch reported that they have 51 men and 66 tributers working on the mine. It was resolved to put the flat rods in order to draw water from the 90, at Kist's, when cross-cuts will be driven to intersect the tin lode. The meeting in May will be made special, to consider the subject of erecting a new engine, and dividing the sett.

At Great Retallack Mine meeting, on Tuesday (Mr. Looker in the chair), the accounts made up to the end of November showed a balance of liabilities over assets of 3751. 17s. A call of 3s. per share was made. The report of the agents congratulated the shareholders upon the fine prospects of the mine. Capt. Odgers was appointed manager, at a salary of 54. 5s., and Capt. J. Harris, the resident agent, at a salary of 64. 6s. per month. It was resolved that in future the mine should be open to private inspectors on Fridays only, and that proceedings in the Stannards Court against defaulting shareholders be stayed, provided the calls and costs incurred be paid.

At East Wheal Russell meeting, on Thursday (Mr. Jardine in the chair), the accounts, for the three months ending November, showed a debit balance of 7531. 8s. 11d. The assets exceeded the liabilities by 901. 2s. 9d. A call of 2s. 6d. per share was made. Details in another column.

At the Lady Bertha Mine meeting, yesterday, the accounts showed a debit balance of 411. 4s. 10d. A call of 1s. 6d. per share was made. A letter was read from Capt. Harpur, recommending the shareholders to take steps to secure the ground eastward of the present boundary. After some discussion, it was agreed that the consideration of the question should be deferred to allow the secretary time to obtain the consent of the holders of the sett. It was resolved to prosecute the mine in a more vigorous manner, with a view of developing the fine course of ore in the 29 and 40 ft. levels. The committee were authorised to take steps to enforce payment of the arrears of call.

At the Scottish Australian Investment Company meeting, to be held on Feb. 1, the report of the directors to be submitted states that, except to a small amount, no sales of land or other real estate have been effected in the course of the half-year. The gross profits realised, including 1899, set aside at last balance, and now brought forward, and 999. 18s. 4d. received in London for commission, transfer fees, &c., amount to the sum of 25,394. 17s. 2d. The total profits are entirely derived from the ordinary sources of the company's revenue—rents, interest, and commission. The directors will propose a dividend, payable on Feb. 13, on the ordinary stock of 300,000, being at the rate of 10 per cent. per annum, less income tax, which will require 15,000, and leave to the credit of the reserve fund 8074. 6s. The report of the auditors (Messrs. J. Becher and W. B. C. Maxwell) states that the usual half-yearly certificate from the Hon. G. K. Holden, Esq., M.L.C., dated July 1, has been received, and certifies that the title deeds and securities for loans and debts due to the company are safe, and in order, and in possession of the company. The total amount of loans and debts due to the company, and of bills discounted with security, on June 30, was 436,941. 2s. 7d.; and the valuation of the lands, stock, and other securities held for the same was, at that date, 883,955.

On the Stock Exchange there has been a moderate demand for Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Drake Walls, 1 to 14; East Carn Breu, 34; Great Wheal Vor, 17, 17, 18, 18, 17, 17; Marke Valley, 44; North Wheal Crofty, 54, 54, 54, 54; West Chiverton, 2, 60, 65, 63, 65, 64; Great Laxey, 17, 16, 17; Chiverton, 83; Devon Great Consols, 416; East Lovell, 11; West Caradon, 114; Clifford, 84. In Colonial Mining Shares the prices were:—Yudana-antana, 14; Scottish Australian, 1. In Foreign Mining Shares the prices were:—Chontales, 2, 2 7-16th; 2 11-16th; Fortuna, 2; St. John del Rey, 52, 52, 54, 53, 54, 54, 55; Anglo-Brazilian, 7, 7-16th; Don Pedro, 7, 7-16th prem.; 5-16th prem.; Cobre, 15-16th.

COAL MARKET.—The arrivals this week only numbered 57, nearly all steamers. The sudden break up of the frost caused almost a suspension of business in house coals for the moment, but a reduction in the top price of 5s. per ton gave a better tone to the market, and a more active enquiry ensued. Hartley's without material alteration. Hetton Wallsend, 23s.; South Hetton Wallsend, 22s. 6d.; Bradly's Wallsend, 21s. 3d.; Heugh Hall Wallsend, 21s. Ships unsold, nil. Ships at sea, 30.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in December was 612,284 tons, against 648,748 tons in the corresponding month of 1865, showing a decrease of 36,464 tons. The particulars are:—From the Northern ports, 266,447 tons; Yorkshire, 20,904 tons; London, 4161 tons; Liverpool, 49,271 tons; Severn ports, 227,964 tons; and Scotch, 42,937 tons. The increase was:—London, 2263 tons; Severn ports, 27,680 tons. The decrease was:—Northern ports, 14,455 tons; Yorkshire, 3046 tons; Liverpool, 23,164 tons; Scotch ports, 25,742 tons. Total shipments, 9,368,622 tons, against 8,585,118 tons, showing an increase of 783,504 tons.

THE COPPER TRADE.—Messrs. Vivian and Younger (Jan. 25) write:—The market for most descriptions is again lower, and transactions are few, and generally speaking, small. Ore and regulus maintain their price—15s. per unit on the spot, and 15s. 1/4d. to arrive, having been paid. All other sorts flat at our quotations.

PETROLEUM IN AMERICA.—The petroleum trade, which is now chiefly confined to the wells in Pennsylvania, was scarcely remunerative during last year, the price of oil being very low, on account of the supply exceeding demand. The production for 1866 is estimated at 2,500,000 barrels of refined oil, of which 1,400,000 barrels were exported, and the balance was either consumed or still stored at home. The supply still on hand in home and foreign markets is estimated at 733,000 barrels—a fact which shows that the market is glutted, an amount equal to one-third the entire consumption of 1866 being still on hand. The exportation of petroleum in 1866 was more than in 1865. In all regions it is announced that the producers are endeavouring to make

some arrangements, by stopping up wells and otherwise, to reduce the excessive supply, in order to put the price up to a remunerative figure. Their success in this is somewhat questionable, however. The Sheriff of Venango, county Pennsylvania, announces that he will sell at public auction, for unpaid taxes, the lands of nearly 50 joint-stock petroleum companies which have become bankrupt.

PETROLEUM IN ITALY.—An advertisement appears in another part of the Journal respecting an enterprise which seems to recommend itself to investors, from the fact of the seller permitting his property to be sampled or experimentalised upon previous to the final purchase being completed, and that the whole of the money (30000) now to be subscribed is to be solely devoted to the purchase and further development of the wells from which the oil brought over has been already raised, no directors' fees or other expenses of management being incurred in this preliminary undertaking.

NITRO-GLYCERINE.—Protected, or in explosive, Nitro-Glycerine is now being manufactured and extensively used on the Continent, and a cargo having been lately consigned from Hamburg to Carnarvon was destroyed by fire while at anchor at Cuxhaven, under such suspicious circumstances that the master and crew were arrested, and sent to Hamburg for examination; and the master has since confessed that the vessel was wilfully fired. The following article on the subject has appeared in the Hamburg *Borsen Halle*, evidently written before the master's confession was known:—

"A short time since the Committee of the Association for the Promotion of Arts and Useful Professions, specially appointed for the purpose, instituted an enquiry respecting the new invention of Mr. Nobel, for making his blasting oil (nitro-glycerine) non-explosive, by adding thereto methyl-alcohol, and thereby removing all danger in its transit. The investigation and experiments of the committee resulted in a most favourable report, of which the following is the conclusion:—The committee, after the preceding trials, have arrived at the conclusion that blasting oil decomposed by pure methyl-alcohol, so long as the latter has not evaporated, is really non-explosive. This evaporation, however, is only possible when the chamber or vessel in which the oil is placed is so large and exposed that the alcohol may evaporate. In closed vessels, therefore, such evaporation cannot take place. The protected blasting oil, in the opinion of the committee, when properly treated, is altogether non-explosive, and consequently without any danger in transportation.—C. E. HERMANN, A. L. I. MEIR, ED. ZINKERSEN, W. KRUZZ.

The special reports received of the fire of the *Patriot*, at Cuxhaven, on Dec. 9, and its final explosion, fully corroborate the above report. The fire originated about midnight, in the fore-castle, and when the captain awoke, about half-past one, he was met by the flames, but having only one bucket on board all endeavours to extinguish the fire were useless. The ship burnt (all exertions to master the fire having proved in vain) for ten hours, and the following morning, at forty minutes past nine, an explosion of the nitro-glycerine took place. The methylated blasting oil had consequently during the last few hours sustained a very considerable heat without exploding. It was only after the great heat had caused the methyl-alcohol to go over into a gas-forming state, and by its pressure forced the stoppers or corks of the vessels, that an explosion of the nitro-glycerine could take place. This result completely corresponds with one of the experiments made by the committee, described in their report as follows:—

"No. 10.—The committee proceeded to a huge pile of wood, which was set on fire, to ascertain how protected oil would act in a conflagration. The cork of the bottle placed in the fire was soon blown out, and the contents ran into the fire; the oil and the alcohol burnt as usual, with a not very brilliant flame. The alcohol, being much more volatile than the oil, burnt much more rapidly than the latter, by which means a small quantity of explosive oil was obtained, which on attaining the degree of heat at all times required to explode blasting oil (180 centigrade) exploded with a slight report."

There is, therefore, no doubt that the protected blasting oil is, at all events, not more dangerous from fire than petroleum, spirits, and other like articles of commerce. These articles would not, indeed, have withstood the great heat for so long a time as the protected nitro-glycerine did without exploding. We may add that the mode of packing the nitro-glycerine, which is in well secured tins, enclosed in wicker-work and baskets, instead of in wooden barrels, like petroleum, &c., forms a great additional safeguard against fire, one of the chief risks of which in the case of petroleum, &c., arises from leakage from the barrels. There appears to be no doubt that in the case of the *Patriot's* cargo a comparatively small portion only of the protected nitro-glycerine exploded, for if it had been prepared and shipped in the explosive state the concussion from the explosion of a part must have exploded the whole, and the report would have been very much louder than it is represented to have been, and more serious consequences might have ensued.

IMPROVED BLASTING POWDER.—The fatal accidents which have occurred in the collieries of Barnsley and other places have led to renewed efforts to introduce an improved blasting powder, which it is claimed can be used for blasting the coal without any danger of igniting the explosive gases, since the whole charge is entirely buried in the bore-hole, and neither flame nor stones are projected. Extensive works, adapted to the manufacture of Messrs. Schaffer and Bubenbergs powder, are about to be erected in Belgium, and the powder will, ere long, be offered in the mining districts of the United Kingdom. It has been proved by long practical experiments in the Roundwood Tunnel, near Dublin, that with the improved powder 60 to 70 per cent. more work was done in the same time by the same miners, and that the consumption was only half that of common blasting powder. Scarcely any smoke or vapour is given off in the discharge of the powder, which gives it a further advantage underground, and there is no greater danger in manipulation than with common powder.

MR. JOHN HOSKING, MINING ENGINEER, (Late of Ashburton, Devon). MR. HOSKING, having had 29 years' practical experience, OFFERS HIS SERVICES AS MINE SURVEYOR, VALUER OF MINING MACHINERY, &c., TO INSPECT ANY MINING PROPERTY, either at home or abroad. Terms of application.—14, Liverpool-street, London, E.C.

GUIDE TO INVESTORS.—MR. SPARGO'S "Guide to Investors" for the present month contains a tabulated statement of Banking, Mining, and other Companies, showing the depreciation in value during the last twelve months; and a price list of shares in Banks, Canals, Railways, Bridges, and Finance Companies up to Tuesday, the 8th instant. It also contains articles on "Bulls and Bears," and their effects; a retrospect of 1866, and Prospects of 1867; the Revenue, our Position and Prospects; the Mines and the Hall; with necessary detailed information connected with the Stock and Share Markets. Mines, and Miscellaneous Companies. 224 and 225, Gresham House, Old Broad-street, London, E.C.

BRITISH AND FOREIGN INVESTMENT.—MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C. TRANSACTS EVERY DESCRIPTION OF BUSINESS IN THE PURCHASE AND SALE OF SHARES IN BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, AND ALL OTHER DESCRIPTIONS OF BRITISH AND FOREIGN STOCK.

MR. SPARGO has for sale shares in English mines paying from 12 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.

MR. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will at all times give the best advice as to investments in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.

MR. SPARGO has published the following works, viz:—Statistics and Observations upon the Mines of Cornwall and Devon, 1859—2s. 6d. Ditto ditto ditto ditto 1860, price 2s. 6d. Ditto ditto ditto ditto 1862, price 5s. Ditto ditto ditto ditto 1864, price 5s. Ditto ditto ditto ditto 1865, price 5s.

Physical, Geological, and Parish Map of Cornwall. Scale, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers. Geological Maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses by which it is traversed. Price 2s. 6d. each.

A Model, or Relief, Map of Cornwall (6 ft. 6 in. by 5 ft.), presenting the names of every town and village, as also every characteristic point of the county. Price 5s. 5d.

Dividends received, calls paid, and all orders promptly negotiated. Commission 1 1/4 per cent.

MR. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.

MR. SPARGO'S Statistics for 1866 are now ready. Bankers: Metropolitan and Provincial Bank (Limited).

NOTICE OF REMOVAL.

MESSRS. TREDINNICK AND CO., DEALERS IN STOCKS AND SHARES.

MR. RICHARD TREDINNICK, MINING ENGINEER AND CONTRACTOR.

MR. THOMAS TREDINNICK, SCRIVENER.

OFFICES.—ST. MICHAEL'S HOUSE, CORNHILL, LONDON.

The business hitherto conducted at 78, Lombard-street is transferred to the above address.

Stocks, Shares in Banks, Railways, Canals, and Insurance Companies dealt in, and Money Advanced upon all sound Securities. Principals alone treated with.

TO MINE, SLATE QUARRY, AND RAILWAY COMPANIES.—CAPT. C. WILLIAMS IS NOW OPEN TO UNDERTAKE ALL KINDS OF CONTRACTS, such as DRIVING LEVELS, SINKING SHAFTS, CONSTRUCTING WATER COURSES, CANALS, TRAMWAYS, &c., and ERECTING ALL SORTS OF MACHINERY FOR MINING AND OTHER PURPOSES, having on hand at all times a first-class staff of miners and machinists, who will proceed to any part of the world upon the shortest notice. N.B.—In all cases 30 per cent. will be left in hand until the work is complete. Tyn-y-Wern, Taliesin, via Shrewsbury.

Geology—King's College, London.

GEOLGY—KING'S COLLEGE, LONDON.—Prof. PENNANT, F.G.S., will COMMENCE a COURSE of LECTURES on GEOLOGY on FRIDAY, January 25, at Nine A.M. They will be continued on each succeeding Wednesday and Friday at the same hour. A shorter course will be given on Wednesday evenings from Eight to Nine. First lecture, Jan. 30.—Text-book: Lyell's Elements of Geology. R. W. JELF, D.D., Principal.

JOHN HOCKING AND SON, ENGINEERS, REDRUTH, CORNWALL, CALL THE ATTENTION OF COLLIERY PROPRIETORS AND WATERWORKS COMPANIES to the present favourable opportunities for the purchase of almost every description of CORNISH PUMPING ENGINES, at low rates. Plans, estimates, valuations, removal, &c., of every description of mining machinery undertaken.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon. Mining, Railway, and other Shares bought, sold, or exchanged. Shares for sale in mines and quarries that will pay 15 to 20 per cent. per annum. Offices, 5, Finsbury-street, London, E.C.

MANCHESTER, AND WEST END OF LONDON. MR. W. HANNAH, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER, ROYAL INSURANCE BUILDINGS, KING STREET MANCHESTER; and 449, STRAND, LONDON, W. INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices. A Monthly Investment Circular on application.

MINING OFFICES, MANCHESTER. THOMAS MOLYNEUX AND CO., MINE AGENTS AND SHAREBROKERS. Reliable information can be obtained as to purchase and sale of shares. Offices of the Ellen United Copper and Zinc Mining Company (Limited), and Hazell Grove Silver-Lead Mining Company (Limited). THOMAS MOLYNEUX, secretary, 28, Princess-street, Manchester.

LEAD ORES. Date. Mines. Tons. Amount. Purchasers. Jan. 24—Wheal Mary Ann 52 25 2 0 Sheldon, Bush, & Co.

BLLENDE. Date. Mines. Tons. Price per ton. Purchasers. Jan. 24—Trellogan 100 4 10 6 H. Southern & Co.

BLACK TIN. Date. Mines. Tons. Price per ton. Amount. Purchasers. Jan. 9—Wh. Uny 9 17 2 13 48 5 0 385 9 6—Chyandour. 12—Leeds & St. Aub. 7 1 1 2 49 12 6 2729 13 6—Boltho. 17—Great Wh. Vor 51 4 1 6 342 6 6—Boltho. 22—Penhal Wh. Vor 6 16 1 0 50 5 0

COPPER ORES. Sampled January 2, and sold at Swansea January 22.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Berehaven	106	104	27 14 6	Cuba	81	213	416 6 6
ditto	105	104	7 18 0	ditto	10	63	45 0 0
ditto	120	93	6 17 6	ditto	80	213	16 4 6
ditto	73	94	6 18 6	ditto	79	213	16 10 6
ditto	78	10	7 3 6	ditto	44	213	16 7 6
ditto	100	10	7 4 6	ditto	3	74	54 14 0
ditto	49	10	7 3 6	Port Lincoln	37	213	16 6 0
Concordia	26	143	10 14 0	ditto	8	32	21 1 6
ditto	25	15	10 16 0	Residuum	12	293	20 15 0
ditto	15	15	11 1 6	Californian Ore	54	173	12 16 0
ditto	8	22	16 16 0	ditto	90	104	7 2 6
ditto	26	153	11 10 6	ditto	85	104	7 0 0
ditto	1	31	22 15 0	ditto	47	94	7 1 6
Victor Emanuel	15	9	6 7 6	ditto	41	94	7 0 6
ditto	7	11	8 15 6	ditto	117	153	11 8 6
Cape	9	32	17 13 6	ditto	59	19	13 18 6
ditto	2	24	17 13 6	ditto	47	31	22 5 0
African	3	34	25 10 6	ditto	10	11	7 10 0
Casali	13	143	10 12 0	ditto	2	15	10 10 0
Copper Ore	4	23	16 14 0	Newfoundland	6	54	31 1 0
Cuba	110	143	10 15 0	Currawang	17	123	8 15 0
ditto	109	143	10 16 0	ditto	7	123	9 2 6
ditto	15	64	46 15 0	ditto	3	14	10 1 0
ditto	106	143	10 18 0	ditto	2	8	5 7 6

TOTAL PRODUCE. Berehaven 631 4612 12 0 Cuba 639 2058 6 0 Concordia 101 1171 2 6 Port Lincoln 41 730 10 0 Victor Emanuel 22 157 1 0 Residuum 12 249 0 0 Cape 11 253 16 6 Californian Ore 54 1858 1 0 African 3 76 11 6 Newfoundland 6 21 6 0 Casali 13 187 16 0 Currawang 29 253 17 0 Copper Ore 4 66 16 0

COMPANIES BY WHOM THE ORES WERE PURCHASED. Tons. Amount. Copper Miners' Company 148 11-12-1204 11 2 Freeman and Co. 167 2145 3 9 Grenfell and Sons 221 3082 10 10 Sims, Williams, & Co. 178 3467 19 0 Vivian and Sons 220 2744 17 4 Williams, Foster, & Co. 533 5636 10 3 Mason and Elkington 724 500 7 0 Bankers and Sons 304 2821 5 5 Sweetland, Tuttle, and Co. 724 500 7 0 Landore Copper Company 55 1069 18 0 Total 2064 293,164 12 6

NO SALE Feb. 12. TOTALS AND AVERAGES. 21 cwt. Produce. Price. Standard. Whole sale 2064 15 411 4 6 497 16 9 TOTALS AND AVERAGES OF LAST SALE. 21 cwt. Produce. Price. Standard. Whole sale 1091 104 47 3 3 490 11 3

COPPER ORES. Sampled Jan. 9, and sold at Tabb's Hotel, Redruth, Jan. 24.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
South Caradon	77	44 6 0	North Treskerby	47	41 14 0
ditto	73	11 15 6	ditto	46	4 5 6
ditto	70	7 11 0	ditto	45	4 3 6
ditto	68	4 10 0	Wheal Rose	46	4 16 6
ditto	56	10 18 6	ditto	56	7 4 6
ditto	55	7 19 0	ditto	48	4 11 0
ditto	52	15 11 0	ditto	44	4 9 6
ditto	47	13 15 6	ditto	44	4 9 6
Clifford Amalgam	66	4 3 6	ditto	41	3 19 0
ditto	61	4 8 6	Phoenix Mines	81	4 10 6
ditto	60	3 4 6	ditto	70	3 16 0
ditto	57	3 3 0	ditto	20	8 14 6
ditto	51	2 6 0	West Caradon	60	5 5 6
ditto	33	4 11 6	ditto	68	7 15 6
ditto	13	4 11 0	ditto	9	2 10 6
North Treskerby	70	5 16 6	Craddock Moor	65	5 10 6
ditto	57	5 16 0	ditto	15	2 19 0
ditto	55	5 14 6	Great Wheal Busy	25	1 3 6

TOTAL PRODUCE. South Caradon 498 41539 5 0 Phoenix Mines 117 4897 0 6 Clifford Amalgam 341 1237 0 6 West Caradon 133 821 16 6 North Treskerby 420 1658 13 0 Craddock Moor 80 391 15 0 Wheal Rose 305 1667 11 0 Great Wh. Busy 25 48 15 0 Average Standard 1104 17 0 Average Produce 84 Average Price per ton 45 10 0 Quantity of Ore 1873 tons Quantity of Fine Copper 155 tons 12 cwt. Amount of Money 411,161 16 6

LAST SALE.—Average Standard, 1113 15 0.—Average Produce, 84.—Standard of corresponding sale last month, 1102 18 0.—Produce, 74.

COMPANIES BY WHOM THE ORES WERE PURCHASED. Names. Tons. Amount. Vivian and Sons 348 2510 1 8 Freeman and Co. 268 1060 2 3 Grenfell and Sons 140 1160 17 11 Sims, Williams, & Co. 223 1832 16 10 Williams, Foster, & Co. 534 566 3 3 Mason and Elkington 724 500 7 0 Bankers and Sons 304 2821 5 5 Copper Miners' Company 287 745 18 0 Total 1873 411,161 16 6

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday next.—Mines and Parcels.—

WATSON AND CUELL'S MINING CIRCULAR
WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON AND CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and the state of the share market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON and CUELL have always selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON and CUELL they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are also daily asked their opinion of particular mines, as well as of the general state of the market, and they give their advice, and recommend mines to the best of their judgment and ability, founded on the most practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectation they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

DRAKE WALLS, AND PRINCE OF WALES.—("J. R.")—The lode of Prince of Wales runs east and west, and nearly through the centre of West Drake Walls sett, which immediately adjoins Prince of Wales to the east, and the rich course of ore is running towards it, though at present some considerable distance from the boundary. We understand the lode has been cut good in West Drake Walls, and this accounts for the great number of shares that have lately been picked up in Drake Walls; for West Drake Walls belongs to and is a part of Drake Walls, and may possibly ere long be worked separately on the Prince of Wales lode. In this case a holder of a share in Drake Walls would have one in West Drake Walls at par, and keep the same interest in the old mine, which has been very productive for tin, and with a rise in the metal may again become a paying mine. Formerly the mine paid good dividends, and a history of it will be found in Mr. Watson's "Cornish Notes," second series, published in 1863. At that time the mine was making a profit of about 300l. per month. Referring to Prince of Wales, in the same Notes, in June, 1863, the writer said—"No one can doubt that the mine is a cheap and fair speculation."

"A. W. C." (Bath).—No. 2 sell; hold others for a time.
"J. J."—There is, we think, every probability of tin going up.
"A. J. H."—1, 2, 3, 4, may all do well, especially with a better price for tin and copper. For a rise we should prefer 2 and 3; 4, we fancy, has seen its highest for the present.

REDMOOR.—A Shareholder.—The lode will soon be cut in the 62, and if found as good as indications hold out, there will be a great rise in shares. Of late they have been very low, and also reduced to half the original number for forfeitures and relinquishments. At a shallow level the lode was a very fine one. In the 52 it was in disorderly ground. Our own idea is that a good lode will be cut, and shares may see 20s. or 30s. And that many others think the same may account for the number of shares that have been quietly picked up of late.

"ADAM."—When the lode was cut good in the 45 and Prince of Wales, shares went to 40s., and it was said by "practical men" they would reach 50l. if it held good down to the 55. The 55 has now been cut richer than the 45, and the mine established as a good property; but every means have been taken to put down the price of shares, so that large purchases might be made at a low price. Those who have followed our advice in this mine have done well, and will yet do better by holding. We say also, the cutting of the lode in the 55 is of great importance to Drake Walls, and in this and Redmoor immediate purchases should be made.

MINERAL PRODUCTS OF SPAIN.—Among the richest mines in Spain the first that must be named are the quicksilver mines of Almaden, which, till the recent discovery of this metal in California, have almost exclusively supplied both Europe and America. The mineral districts of Almaden have already been worked by the Romans and by the Moors. Pliny has recorded two interesting facts—First, that the Greeks imported red cinabar from Almaden 700 years before the Christian era; and second, that Rome, in its time, annually received 70,000 lbs. from the same mines. These mines are so extremely rich that, though they have been worked pretty constantly during so many centuries, they have hardly reached the depth of 300 yards. From 1820 to 1849 the average annual amount produced was 20,000 quintals, or 1975 tons. At the present time the average annual amount produced is about 1500 tons, giving employment to from three to four thousand men. At the present time the yearly consumption of quicksilver does not exceed 400 quintals (about 390 tons), and is distributed in the following manner:—1200 tons to Mexico, 1000 tons to South America, and 300 tons to Europe. The mines of Almaden produce annually from 150 to 1600 tons; those of California, 700 tons; Istria and Carinola, and other parts of Europe, 300 tons. The exportation of quicksilver from California is increasing every day, and the injurious competition made by that country in the American market with Spain threatens every day to become a monopoly. The mines of silver in Spain are some of the most productive in Europe. Since the reform of the laws relating to mining in 1825 and 1826 the mines have been thrown open to foreign enterprise, and many mines have been opened in the Galici and Luján mountains. In the province of Murcia more than 1200 mines are being worked at the present time, and those that have been opened within the last few years in the Mount Almagro are remarkable for the richness of the ore, the lead containing more than 1 per cent. of silver. The mines of Vigen del Carmen, Observacion, Animas, La Esperanza, La Concepcion, La Estrella, and many others, are of great importance. The mines of La Carman annually produce 2,700 tons of minerals; Las Animas produces 1200 tons, the value of which may be estimated at 62,500l. The annual production of the mines of La Estrella may be valued at about 15,000l. The other mines produced like quantities. Those of Linares, the property of State, and worked by Government, are also deserving of notice. The number of workmen employed in the mines in the province of Murcia amounts to nearly 11,000, and they produce annually about 416,666l. The principal smelting works established at Cartagena employ more than 3000 persons. The principal tin mines in Spain are those of Galicia and Asturia, and the production might be considerable. Zinc is also very abundant in the provinces of Guipuzcoa and Santander, and might equally be worked to advantage. By encouraging a railway undertaking, that would facilitate the principal coal fields to the general network of lines, the Government would be enabled to develop to an enormous extent the metallurgical resources of Spain. The low price of fuel is most necessary, in order that the smelting establishments may be profitably worked; this condition once fulfilled, and the necessary communication established, the means of transport facilitated in every way, with a reduction to a moderate tariff, the Spanish mines will increase considerably in value.

EMERY.—So far as known, there are but two mines of emery in the world, one at Chester, in Hampshire county, Massachusetts, and the other in the classical little island of Naxos, in the Egean Sea. The latter has been controlled by an English house, and they have always charged their own prices.

DISCOVERY OF GOLD IN NORTH BRAZIL.—The development of the mineral wealth of Brazil is still in its infancy, but the Government of that country is alive to the fact, that by granting liberal concessions, mining operations are every year being gradually extended. The district of Minas Geraes, where the celebrated mines of St. John del Rey are worked (which have yielded nearly a million sterling to the fortunate shareholders in that undertaking), it would now appear it is not unlikely to be out-rivalled by discoveries that have been made in the province of Ceara, for not only gold, but copper, iron, graphite, saltpetre, and various other mineral products, are to be found in numerous places throughout that province. The geological features of the country are extraordinary. Nature here seems to have been at work for ages, doing the work of the miner, and having bared the primitive rocks from the foot of Serra Grande for many miles in extent, quartz veins, bearing gold, are readily accessible, obviating the necessity of sinking deep shafts to reach the lodes, which are in many instances so serious an item of expense in their development. From samples of quartz recently received from Ceara, and which have been tested, the yield of gold fully bears out the previous reports of the auriferous richness of the quartz veins that are to be met with traversing that country in almost every direction. These features cannot fail to attract attention to Ceara at no distant date. By our file of Brazilian newspapers, we observe that a concession has been recently granted by the Brazilian Government for working mines for the term of ninety years, at a nominal royalty, with the importation duty free of mining implements for five years from the date of commencing work.—*Brazil Mail.*

MEANING OF THE TERM CANNEL COAL.—I observed large quantities of the Cannel coal and took some pains, both here and subsequently at Kendal, St. Helen's, and other places, to obtain the meaning of the term. A considerable quantity is procured at St. Helen's, though the greater quantity comes from Wigan. It is dug out of the same shafts with ordinary coal, but exists in different seams. It appears to be a substance between the ordinary coal and jet. In Liverpool and elsewhere it is advertised by boards and placards—"Coal and Cannel sold here." It is invariably spelt "Cannel." If it has really taken its name from Kendal, the people of the town are not aware that it has any such origin; neither is there any reason that it should be called "Cannel coal." It having been dug before equals were adopted, and transported together with larger quantities of ordinary coal. It seems to be the general opinion that having been used to light the men at their work, and serving as a candle, it became by corruption "Cannel" coal. It is singular how soon words and phrases creep into use, and totally obliterate every recollection of the cause that produced them.—*Tour through the Manufacturing Districts.*

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending Jan. 20 was 8418l. 6s. 10d.

NEW WORK ON COAL MINING.
Just published, in one volume, post 8vo., illustrated, price 7s. 6d., cloth.
A TREATISE ON COAL AND COAL MINING.
By WARRINGTON W. SMYTH, M.A., F.R.S.,
Chief Inspector of the Mines of the Crown, and of the Duchy of Cornwall.
"Contains an enormous amount of really useful practical information, conveyed in a popular and interesting manner. The work cannot fail to find a large class of readers."—*Mining Journal.*
London: Virtue and Co., 26, Ivy-lane, Paternoster-row.

Notices to Correspondents.

•• Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

BISMUTH.—If your correspondent, "T. W.," will apply to us, we can give him information about Bismuth.—*LISTER AND BIGGS: Laurence Pountney-hill.*

NEW BANPHELYDE.—In last week's Journal, in the statement of copper ores sold at the Cornwall ticketings for the quarter ending December, 1866, it is stated Banphele, 139 tons, 671l. 15s. 6d. This is an error: it should be 139 tons, 1398l. 15s. 6d.—*JOSEPH FOWE.*

COLLIERY EXPLOSIONS.—THE MORFA COLLIERY.—Mr. W. Gray, the manager of the Morfa Colliery, in reply to the remarks of "Colliery Manager," in last week's Journal, states that he was not the writer of the letter signed "Thomas Gray," and commented upon; and, though he has no desire "to see himself in print," it may be necessary to state this for the information of "Colliery Manager" and the public. At the same time, he suggests that if "Colliery Manager" altered his tone of writing (especially as it is quite clear that accidents occur in all parts of our great mining country, as well as in the colliery alluded to), he would think it more likely that Mr. Thomas Gray would follow up his own letter.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JANUARY 26, 1866.

Co-operation or partnership between master and man—whether "to be or not to be," is one of paramount importance at this moment, when the public at large are discussing the question of Trades' Unions and Strikes, and the consequences ensuing. If there be any merit in the voluminous communications of Messrs. CREED and WILLIAMS, it is the fact of having directed attention to the several points now under consideration, both on the side of the master as well as the man, but in every other respect we consider their arguments fallacious, and their general deductions without correct data, while the main object of their letters being to show the deteriorated position of our iron trade through foreign, especially Belgian, competition has most signally failed; for the statistical evidence adduced by various correspondents prove the results to be the very reverse. It is, therefore, superfluous to dwell further on this head, but it is essential to say a few words as to co-operation in trade—especially in the iron trade. Messrs. CREED and WILLIAMS consider the principle is not yet sufficiently tried, and the benefit problematical; but in this respect also we join issue with these gentlemen, and cannot see any very serious difficulty in its general adoption. It is true that a captious man might annoy by disputing the correctness of balance-sheets placed before the employed by the employer, and requiring investigation of accounts; but we can scarcely believe that this would be anything more than a rare exception to the rule, particularly when the men have once become recipients of partnership benefit, as well as having had proper wages, as of old. Until the men obtain their portion of the profit, and have to support their families on nominally reduced wages, it is possible that the masters may have difficulty in convincing them of the ultimate advantage to be derived; but even this might be readily overcome by giving extra weekly payments to the men until division of profits accrue, to be deducted from such profits, just as "subsidy money" is given in the mining districts of Cornwall and Devon, where the men are paid by the month, and a month's pay is always in hand, so that a new man does not get the balance of his first month's pay until the end of the second. We look on the co-operative principle as one of great importance and advantage on both sides. Its adoption will render masters independent of strikes, for, necessarily, the men who have a portion of the profits will not strike for higher wages, which would simply be a deduction from their profits; while it would be a "heavy blow and great discouragement" to the present pernicious system of Trades' Unions. It is quite clear that the trade has suffered from the manner in which, it is now supposed, the master is at issue with the man and the man with the master, and some plan must be devised to place both on a proper and equitable footing. One cannot do without the other, and we see no better way of adjusting existing differences than by giving the men an interest in the profits of the master. A writer on the subject appropriately says—"Their usual relation is one of armed peace, interrupted by frequent attacks of open hostility;" whereas by the proposed arrangement harmony and good feeling would be the general characteristic on both sides. Co-operation has been tried in several branches of British industry with good results, and there is no solid reason why it should not be general.

Messrs. FOX, HEAD, and Co., of Middlesbrough, have determined to try the system of co-operation, under the fullest impression, on their part, that it will work well, and "being under the conviction," as they state, "that the present disastrous dispute is really the result of a want of identity of interest between master and man." They have forwarded us a copy of the resolutions under which they intend to proceed, which are based on equity, and embrace all points. The rules in detail are too long for insertion *verbatim* in an article of this nature, but the following is the spirit of each:—

1.—That both parties shall withdraw from all trade combinations; the men renouncing the Union, the capitalists withdrawing from the Ironmasters' Association.
2.—Wages are to be paid at the accepted rate of the trade, subject to subsequent special agreement.
3.—It is necessary that, in dividing profits with the workmen, good and bad years should be taken into account. Accordingly, interest on loans, and 5 per cent. on capital, is to be a regular annual charge on the concern, to be defrayed out of profits, if any; if not, to be carried to the debit of the next year's profit and loss account. Thus the men will share losses as well as profits. A deduction of 2½ per cent. on the value of the works is next to be carried to a sinking fund, until that fund shall amount to 12½ per cent. on the value.—4. The capital invested is when profits suffice to receive a total dividend of 10 per cent. (interest included). All profits above this amount are to be divided equally between capital and labour; the labourer receiving his share in the form of a bonus proportioned to his earnings. Thus, if the profits be less than 12½ per cent. (or, when the sinking fund is filled up, 10 per cent.), the labourers receive nothing. If the profits be 17½ (or 15) per cent., they receive 2½ per cent., or one-seventh of the whole; and suppose this to amount to 500l., and wages paid during the year to 5000l., each man would receive 1s. 3d. in the pound on his earnings; and the man who had earned 80s., rather over 30s. a week, would receive 4l. bonus. Apparently with a view to prevent suspicion or dispute, it is provided that those who may not work for the whole year shall, nevertheless, receive a dividend proportionate to their earnings. Thus, if a man work six months, and earns 40l., his bonus would be 2l. 10s.—6. In order to assist the steady saving agents or workmen to become themselves capitalists, the firm will allow all such to invest in the works, their savings to be withdrawable at any time on six months' notice, bearing interest at 5 per cent. certain, and also proportion of half the excess of profit when that exceeds 10 per cent. The firm will retain power of veto upon the amount thus invested by each employee.—7. Should any investor desire to make his money withdrawable at a fortnight's notice he can do so, but in this case he will not be entitled to any share of profits upon the same.—8. The sick, funeral, and building fund will be henceforth abolished. The works' doctor will be retained, and the infirmary subscription continued, amounting together to 3d. per man per fortnight. The services of the doctor for families, at 4d. per man per fortnight, will be optional, as heretofore. The amount of the building fund now in hand will be deposited as may be decided when the works are again in full operation, in accordance with the object for which it was stopped.—9. In case of any employee leaving, or being discharged at any other time than the end of the year, he will still be paid any bonuses which may have accrued.—10. Messrs. FOX, HEAD, and Co. will retain in their own hands the entire control of the management of the works. The accounts will be duly audited at the end of each year, by an independent public accountant, and so much of the result as concerns the men will be posted in the office window. The decision of the public accountant will be considered final.

Altogether, the movement is one of national importance—indeed, the tranquillity of the mining districts depends, more or less, on the issue, for present arrangements cannot continue; and surely if Unions

be renounced by the men, and Ironmasters' Associations dissolved, a wonderful and, we sincerely believe, a most beneficial change will have been effected, not only for the good of the masters and the men, but for the country generally.

THE NORTH STAFFORDSHIRE COLLIERY EXPLOSION.

The deposition of evidence in the North Staffordshire colliery explosion, at Talke, whereby 91 persons lost their lives, was virtually completed at the date of the last adjournment; for although an opportunity is being given to Mr. McDONALD, secretary to the Miners' Union in Scotland, to prove his allegation that the pit had been in a fearful state for months, it is not probable that the jury will receive much enlightenment from that quarter, it being understood that Mr. McDONALD is not prepared to do more than hand over a copy of the information supplied to him, which, of course, will not be admissible as evidence. It may, therefore, be taken that we are now in possession of all the facts, and are enabled to form a tolerably correct judgment as to the two-fold origin of the calamity—a dangerous accumulation of the gas, and the ignition of the deadly compound. It appears, then, that the explosion took place on Dec. 13, in what is known as the Seven-foot Banbury, a seam of notoriously fiery properties. The mine in question dips due east and west, at an inclination of one in four, and the upcast and downcast shafts are situated low down the incline, and on the south edge of the workings. It is estimated by competent persons that at the time of the accident 25,000 cubic feet of air passed into the mine, by the upcast shaft, every minute. Mr. EVANS, the Government Inspector of the Midland District, questions whether one-fifth of this quantity actually passed through the workings, but his colleague, Mr. WYNNE, the Inspector for North Staffordshire, seems inclined to admit that the quantity of air sent through the mine was sufficient. This, however, appears to be undisputed—that the air was carried in one current along the whole of the rise workings, and back through the deep workings to the upcast shaft. Here we have the first element in the catastrophe—a fiery mine ventilated by a single current of air, carrying into and through the deep levels the gas given off from 20 working faces of coal. Nevertheless, the balance of the scientific evidence is decidedly in favour of the hypothesis that, other things being equal, the mine, with this amount of ventilation, would have been practically safe; but the *gravamen* of the complaint made by the official Inspectors against the management is that the air sent into the mine was not skilfully directed. The evidence in support of this allegation is, primarily, that in order to meet the demand for coal the deep levels were pushed forward with culpable haste, sufficient provision not having been made for their ventilation. In the early part of last year the back dip, by which these deep levels might have been easily ventilated, was drowned by a flow of water in the mine, but the water was pumped out by Aug. 11, when it was discovered that the floor had been so swollen by the flood that it would take some months to restore the air-passage to its original capacity. It was, therefore, decided to drive an upbrow instead. Mr. WYNNE contends that this was unskilful—that the back dip ought to have been cleared out before anything else was done. On the other hand, all the other scientific witnesses (Mr. EVANS excepted) considered that the managers adopted by far the wiser course in driving the upbrow. The second ground of complaint against the management is that the entire ventilation of the deep levels, if not of the whole of the workings, into which it must be remembered the return gas-laden air was carried from above, depended upon a single door on the main jig-brow, the tramway by which the coals were carried from the rise levels to the bottom of the shaft. Here, again, the non-official scientific evidence is favourable to the management, though one gentleman of great experience thought "an oversight" had been committed in the matter of the single door on the jig-brow. Mr. WYNNE, however, submitted that a very grave error in judgment had been committed, for, as it was, everything depended upon this door being kept closed, and to say nothing of the leakage caused by the passage through it of 13 or 14 trains of wagons every hour, any accident preventing its being closed for a quarter of an hour would have been sufficient to divert the air-current, and convert the lower working into a slumbering volcano. Such a casualty actually befel. On the morning of the explosion a train of wagons ran off the rails in the very doorway. It was impossible to close it for 15 or 20 minutes, the life-sustaining current was diverted from the lower workings, and hence we have that accumulation of fire-damp which, as we have said, was the first thing to be accounted for.

The fearful laxity of discipline in the pit explains the rest. Given a fiery mine, subject to the contingencies we have mentioned, when the men were in the constant practice of smoking, and removing protective gauze coverings from their safety-lamps; of firing charges of gunpowder at their own discretion, where the use of gunpowder at all is strongly condemned by the most experienced witnesses; where the firemen themselves carried naked lights in the return air, and allowed the men to go to work in places known to contain gas on the vague understanding that they were to brush it out for themselves; given all this, and the wonder is, not that an explosion took place, but that it did not happen long ago.

With regard to the question of responsibility, the official Inspectors, the only witnesses, it should be remembered, who reflect upon the management, do not impute criminal negligence; but they allege very serious errors of judgment, and that the frightful laxity of discipline, of which the managers declare themselves to have been ignorant, ought to have been known to those who had the power of bringing offenders to justice. On the other hand, it is only fair to say that the men, in their fatuity and madness, exercised extraordinary ingenuity in order to keep the managers in ignorance of the constant violation of rules framed to secure their own safety.

THE NORTH OF ENGLAND IRON TRADE.

The iron trade of this new district has undergone a severe trial during the last six months, owing, first of all, to the failure of OVERSEA, GURNEY, and Co., and of certain contractors heavily engaged with manufacturers for rails and other railway iron; and, secondly, to the prolonged strike of the ironworkers, which has driven a considerable amount of business from the locality into Staffordshire, Wales, and Belgium. The complete suspension of work in the forges and blast-furnaces had a material influence upon the pig-iron trade, as the Cleveland ironmasters depend, to a great extent, upon local consumption. In the North of England district we find that there are about 1200 pig-iron furnaces, which, if in ordinary operation, would require 600,000 tons of pig-iron per annum. During half of the year, therefore, the makers of pig-iron have found their stocks increasing, and the consequence has been that low prices have for a long time prevailed. In the year ago the district was highly inflated with the prospect of a brisk trade, and this was further quickened by the operations of the Glasgow speculators, who were the parties to the famous "rig." Prices continued to advance, indeed, until the collapse came, but it should be noted that, as far as Cleveland was concerned, the high rates which sales were effected were purely fictitious, and in the end the makers who had entered most extensively into those speculative transactions had to suffer great losses—losses, indeed, which far exceeded the actual receipts to what they would have been had the trade gone on in its ordinary way. More than this, the mere seeing the high range of quotations from time to time, and finding everybody doing a brisk trade, demanded a great advance in wages, and in the end secured it for a time, so that the iron cost much more to produce than had been the case previously. All these things were against the makers, and we suspect some serious losses were incurred. But the masters determined in July last to bring down wages to normal levels. In this they did not succeed until a strike had taken place, for four weeks in some cases, and longer in others; and, in the meantime, the blast-furnaces were "damped down"—that is, were filled with coke and covered up, so that no atmospheric air could get in to push on combustion.

Notwithstanding the fact that nearly a dozen furnaces were put out of blast entirely for a time, the make has gone on increasing over the consumption; and at the end of the past year the amount in store was above 60,000 tons, while a larger quantity was in the hands. This was a very heavy stock for the Cleveland district, and the amount has increased still further since the new year commenced.

The production is now only equal to about three-fifths of the capacity of the locality, owing to the number of furnaces out of blast. The low range of prices during the autumn and early winter was generally attributed to the stoppage of the malleable ironworks, but when these were again put in operation it was manifest that this was not the entire cause of the prevailing dullness. When the strike was chiefly over, a little briskness sprang up, and hopes were entertained that a speedy revival of trade would take place. A few weeks, however, dispelled these anticipations, and brought down the prices to their former level. At the present time there is hardly any possibility of arriving at the exact state of prices, as a good deal of underselling is going on; but this may be said, that if no improvement takes place very soon, some of the furnaces will be put out, as it is clear the rates now accepted in certain quarters are completely unremunerative. With the heavy stocks on hand and the number of furnaces out of blast, it is not likely that we may expect anything beyond a quiet trade for some time to come—most probably, indeed, for the whole year.

The manufactured iron department is also exceedingly dull. Rails are now taken at such low rates by the Welsh masters that they are able to monopolise the orders. That district always is in a position to make a harvest when there is a scarcity of orders, as it can manufacture iron cheaper than any other locality, mainly owing to the low wages which prevail there and the cheapness of fuel combined. The shipbuilding trade of the northern rivers has been very much depressed for a considerable period, and still continues dull. Thus the rail-mills and the plate-mills have only been kept partially in operation since the close of the strike. Even those houses which had extensive contracts uncompleted have been kept back by the railway companies delaying deliveries, so that if the work were executed it has had to be kept on hand. A sprinkling of orders has come to hand lately, and there are more enquiries for merchant iron, but prices are exceedingly low. There is a general impression that some further action will have to be taken in order to cheapen still more the cost of production. How this is to be done is a difficult question to solve. Coal is one of the most important items of expenditure in making finished iron, and the demand for fuel in this district is such as to preclude any hope of getting much off the present prices until the requirements of the new iron-furnaces of the Western Coast shall have been met. Any how, this matter is engaging the serious attention of the manufacturers, and doubtless something will be done before long. The men are working steadily and quietly, but they are, in many cases, in great distress, and it will require all their care for years to come to make up for the lamentable results of their late strike.

CONTRACTS ACCEPTED BY THE MERSEY DOCK BOARD.—The Mersey Dock Board, at their meeting yesterday, decided to accept the tenders of Messrs. Wainwright Brothers and Co., for iron buoys, at 18s., and anchor buoys at 7s.; of Messrs. H. P. Parks and Co., to supply mooring shackles at 4d. per lb., and mooring swivels at 5d. per lb.; and of Messrs. Moss and Co., for the supply of a quantity of brass tubes. It should be understood that these tenders are open to the trade generally, and are not merely local.

MINERAL TRAFFIC ON SECONDARY RAILWAYS.—We continue our recapitulation of the quantities of coal and minerals conveyed over secondary railways in 1865. The North and South Western Junction carried 247,639 tons; the North London, 668,322 tons; the North Staffordshire, 810,375 tons; the Redruth and Chacewater, 91,298 tons; the Rhymney, 1,769,822 tons; the Sirhowy (half-year only), 213,087 tons; the South Devon, 132,810 tons; the Swansea Vale, 481,729 tons; the Taff Vale, 3,196,588 tons; the Whitehaven and Egremont Junction, 768,071 tons; the Whitehaven, Cleator, and Egremont, 787,877 tons; the Whitehaven Junction, 275,843 tons; the Great North of Scotland, 201,556 tons; and the Scottish North-Eastern (now merged in the Caledonian), 482,281 tons. Some of these lines, although small concerns, pay excellent dividends, a relatively large mineral traffic being a very profitable element of business.

COAL IN THE BRAZILS.—In the National Exhibition are some coals from the Tubarao basin, situated in the southern extremity of the province of Santa Catharina, S. lat. 28° 5', long. 6° W. of Rio de Janeiro, distant 45 miles west from the seaport of Laguna. The existence of coal in this district has for some years been an established fact, and the Belgian explorer, Van der Lede, in 1842 visited and reported upon some veins visible upon the route from Laguna to Lagoes; but in 1861-2 a practical exploration was carried out by the exhibitor, with an experienced coal viewer from Lancashire, and two foreign engineers, who drove levels and sunk pits over an extensive surface, striking nine beds of coal, in different qualities, 40 feet thick, underlying a sandstone formation, all nearly horizontal, and elevated above the River Tubarao and its affluents, which water the undulating forests that cover this unworked wealth. One adit disclosed a 15-ft. seam, containing 10 ft. of hard coal, not unlike cannel coal, lying almost horizontally, which was traced for two miles. Other levels and pits showed more bituminous, but smaller, veins, from 2 to 4 feet, of which the analysis has been very high in heat-producing qualities. Thirty-seven miles of easy tramroad along the Tubarao Valley alone is wanting to convey this enormous wealth to a port in the river, where large colliers could at once transport it to supply the whole eastern coast of this continent, now demanding nearly 300,000 tons of this fuel annually, for which the country is tributary to England, at four times the cost at which it might be extracted. Such a road would also open out the most fertile and temperate region in Brazil, and carried 20 miles further would enter the celebrated Campos Geracs, where thousands of acres of pasture feed the numerous herds of cattle which now find difficult and prolonged land transit through San Paulo to this market. As it is, the weary traveller having forced his way for days up rivers and through forests, stands on an eminence 50 miles from the Atlantic, and gazing over waving forests sees no sign of man, but the thin blue line of smoke that marks the fire of the Indians, against whose possible violence he has been counselled to carry arms, and he wonders that the reading and intelligent Brazilian has not yet disinterred the sleeping giant, the father of steam, that lies so near to his reach, and made his work to fertilise a country whose soil, climate, and mineral wealth have no rival out of Great Britain.

THE GLACIAL PERIOD IN NORTH AMERICA.—The "Transactions" of the Nova Scotia Institute of Natural Science contains a highly interesting paper on this subject, by Mr. THOMAS BELT, giving the results of observations made by him during the progress of the exploratory works of the Nova Scotia Gold Company, carried on under his direction. In alluding to the glacial rocks and drift beds of Nova Scotia, he maintains that the drift, had it been dropped from the floating icebergs on a submerged land must have levelled when the elevation taking place, it was exposed to the action of the spreading coast line. Mr. Belt accounts for the poverty of the gold deposits of Nova Scotia by the absence of true alluvial deposits in that province. He observes that through much of the drift grain gold is sparingly disseminated, and its distribution affords another argument in favour of the supra-marine theory. In Australia, all the most important deposits of alluvial gold have been found in valleys lying immediately above the bed rock, beneath beds of gravel and clay; wherever surface washings have been discovered much richer deep sinkings have been found in the vicinity. This, indeed, seems to be a necessary result of the sorting arrangement of water. But in Nova Scotia, though denuded auriferous quartz veins are abundant, no similar deposits have been found with one exception, to the consideration of which I will return. The gold, instead of being concentrated at the bottom of the superficial deposits, is either distributed throughout them, or occurs in greater abundance at the surface than below. The great richness of the gold washings in Australia, and their scarcity and poverty in Nova Scotia, notwithstanding the abundance of auriferous rocks that have been denuded, may be thus explained:—In Australia the denuding agent was water, which carried off the ground up, but only a small proportion of the original rock mass is left. In Nova Scotia the denuding agent was glacier ice, which carried off all the stony masses and their metallic contents. The drift beds left contain only the same proportion of gold as existed in the original rock mass, excepting where subaerial denudation has concentrated it on the surface. Perhaps in sediments older than the glacial period, and which have escaped destruction during it, or in the beds of existing streams, or on the present sea coast, deposits of grain gold may be found, but they will be only the exceptions to the general rule. I have mentioned one exception. It belongs to the third class; the gold washings at the Ovens, near Lunenburg, which, though limited in extent and soon exhausted, for a time largely remunerated some of those employed upon them. From the side of a rocky promontory, traversed by numerous small auriferous quartz veins, spreads out a bed of glacial drift, throughout which grain gold is sparingly disseminated. The sea is slowly eating into this

bed, and re-arranging its materials. It grinds up the stones to shingle, and finally to sand and mud, which it carries off to deeper water, leaving behind the tough, heavy gold. This is found at the bottom of the shingle between the marks on the surface and in the sand and mud, where the gold formerly distributed throughout a large mass of drift has been concentrated. Now, if the country had been submerged during the deposition of the glacial drift, every part of it, during its subsequent elevation, would at some time have formed a portion of its ever-advancing coast line, and been subjected to the action of the waves; and such deposits as those of Lunenburg, instead of being confined to the present shore, would have been formed all over the emerging land. The paper contains a vast amount of interesting information, which can be very profitably studied by all engaged in the search for and treatment of gold.

MINING, METALS, AND MINERALS—PATENT MATTERS.

By M. HENRY, Patent Agent and Adviser, M. Soc. Arts, Assoc. Soc. Eng.

Applications for Patent have been made by the following, amongst others:—No. 75, KENDRICK, Walworth, furnaces and fire-bars.—No. 76, HOWARD and BOUSFIELD, Bedford, tubular steam-boilers.—No. 77, COIGNET (communicated to me from Paris), beton, and its applications.—No. 79, Dr. BUSS, Shorelditch, marine structures, embankments, sea-walls, &c.—No. 80, TOMLINSON, Manchester, ovens and furnaces.—No. 82, WEBSTER, Birmingham, DEANE, London, and RUMBLE, Sheerness, metallic zinc paint.—No. 87, BLAGDEN, Hackney Wick, separating silver from lead (communicated from Marquez-Millan, of Marseilles).—No. 101, HOCKING, Poplar, condensing smoke and vapours.—No. 111, CLAYTON, West Bromwich, melting and refining furnaces.—No. 117, JAMES, Poole, ventilating mines.—No. 123, BARKER, Northfleet, mixing, pressing, and moulding coal, and dividing it into blocks, &c.—No. 127, SMITH, Halifax, making wire articles.—No. 128, LIETAR, Brussels, composition for welding iron and steel.—No. 133, WELDON, Highgate, chlorine, and production of artificial peroxide of manganese.—No. 139, BATE, SMETHWICK, and ASHER, Birmingham, moulds for fenders, &c.

A Patent has been taken by W. J. and H. HARRISON, for machinery for hammering cylinders and other articles of sheet metal, particularly applicable to the manufacture of copper, tinned iron, and other sheet metals used in slitting, dressing, and drying machines. The article to be hammered is placed on a cast-iron roller, which is turned round slowly, and in contrary directions alternately, by means of a catch taking into a toothed wheel. Above the roller is a series of stampers or hammers, which are raised in succession, by cams arranged spirally upon a shaft. These stampers or hammers drop by their weight, and the force of the blow is regulated by the varying position of the cam-shaft, or by moving the studs against which the cams act. When the cylinder is hammered sufficiently in one position, it is moved laterally by a screw in such manner as to bring the other portions of its surface under the hammer.—DE LA RUE and MULLER have specified an invention for treating the residues of pyrites. They propose to separate copper and silver from the oxide of iron in their residues. For this purpose the residues are ground to a fine powder, and are then wetted or mixed with sulphuric acid. When the mixture sets it is moulded or formed into blocks, which are subjected to heat in a furnace, the temperature being raised sufficiently to decompose the sulphate of iron, and to leave the sulphuric acid and copper and silver free. The sulphuric acid is for the most part, rendered soluble in water, while the iron is, for the most part, left insoluble. The copper and silver are separated by deposition from the solution in the ordinary way.—HILL has specified some improvements relating to rolling mills. He manufactures cast-iron rolls, with steel axes, upon which the rolls are cast, in sand or in chilled moulds. The axis is supported in the middle of the sand or other mould, and the cast-iron is cast upon or around the axis. The roll is turned and finished in the ordinary way.—HASELTINE has specified an invention relating to metal hoops for casks, barrels, tubes, &c., as a communication from Louis Alberger, of Buffalo, New York. The invention consists in forming the metal hoops from strips of iron or other metal, corrugated or creased longitudinally, and afterwards turned or bent into hoops or bands of the required shape and size. The manufacture of hoops for the cask trade alone must form a large staple of industrial manufacture in England. In reference to this subject it may be observed with sincere regret that a gentleman long and honourably known as a patentee and proprietor of patents relating to casks and hoops, Mr. Joseph Colyer, has recently departed this life. Mr. Colyer was an amiable, intelligent, and highly respectable gentleman; his death is a real bereavement to all who knew him. His latest patent related to an ingenious improvement in apparatuses for casks and barrels, by which the fastening of the aperture was effected by some very convenient contrivances. It is a pity that this patent has lapsed, as it comprehended some really clever arrangements. The last few months have been rather fatal to patentees. Two other well-known names have been included in the public obituary—Snider, the celebrated patentee of the Snider rifle, and Baxter, the patentee of oil colour printing. Both persons of eminence and distinction in the inventive world.

Opposition intended to the following Notices to Proceed on applications for patent must be entered on or before Feb. 12:—No. 2364, STEWART and CHAPMAN, tools and machines for cutting, drilling, slotting, slot-drilling, shaping, and planing metals and other substances.—No. 2474, BAYLISS, iron.—No. 2380, BRASH and YOUNG, oil from shale and other bitumens.—No. 2390, DYSON, smelting iron, and furnaces.—No. 2496, NEWTON (communication from Lugo and Schrader), distilling petroleum and other oils.—No. 3106, NEWTON (communication from Wiegand), extracting oil and paraffin from bitumens.

R. A. WRIGHT and E. WRIGHT have paid the third year's duty on their patent, taken out in 1864, for consuming smoke, and promoting the combustion of fuel in furnaces. These are the smoke-consuming furnace engineers of Haverham, to whose pamphlet on the subject reference was made in one of my preceding articles. It is not as yet possible to form a definite opinion as to the working of the new regulation relating to the deposit of abridgments of provisional specifications, to which reference was made in a preceding article; nevertheless, it is earnestly to be hoped that the deposit of such abridgments will not promote the tendency—observable of late—to insert or to require in a provisional specification further particulars than those which are comprised in the statutory condition, which defined a provisional specification to be a statement of the nature of the invention sought to be secured. M. NORBERT BELVALETTE has applied for a patent, through me, as a communication, for means whereby the tools, apparatuses, or contrivances of machinery may be used in a new way, and worked at various parts of the surface or article on which they are to operate. It may be conceived that an apparatus of this kind will be especially useful in many of the operations for the manufacture of metal articles, in which the practicability of moving the tool or working part of the instrument is a desideratum, on account of its remedying the inconvenience of having to move or adjust the article or material operated upon, in order to get at various different parts of its surface from time to time as the work proceeds.

The statute of William the Fourth, by which the possibility of extending patent privileges beyond the first term of fourteen years was conceded to patentees, has been of late rather frequently put into practice. Mr. R. MALLER, the engineer, has recently obtained an extension for four years of his patent, taken out in 1852, for improvements in fire-proof and other buildings and structures.

FOREIGN MINING AND METALLURGY.

The movement of affairs in connection with the Belgian coal trade has experienced a slight diminution; nevertheless, orders are numerous, and deliveries very active. It may be presumed that the change observed in the temperature during the last fortnight will, if the cold continues, secure the same abundance of orders which has previously prevailed. A circumstance worthy of remark may be mentioned—viz., that the extractors of the Charleroi basin have for some time since refused to conclude long-term contracts, while the last advices report that some of these affairs are in course of negotiation. In the Liège basin extractors would be very desirous to conclude these engagements, even at some sacrifices; but in this group consumers obstinately persist in supplying their requirements only from day to day, waiting for more before entering upon long-term contracts of long duration. Meanwhile, prices prove a great firmness, and the demand is always very considerable. In the basin of the Coudant de Mons the aspect of affairs is the same as in preceding weeks, and prices, upon the whole, maintain themselves at their former level. There are now 63 mines in the coal basin of the Ruhr (Prussia). Since October large numbers of Belgian purchasers have presented themselves for Ruhr coal, and prices have advanced in consequence, but only to a slight extent at present. Three lines of railway accommodate the Ruhr basin—viz., the Cologne and Minden, which runs along the northern part of it; the Rhensish Railway, in course of execution, and in working as far as the town of Essen; and the Bergisch and Markisch, which runs along the southern portion of it. These three lines are nearly parallel to each other, and they cross the Rhine—the first at Cologne, the second at Rheinhausen, and the third at Ruhrort. They sustain naturally a very great competition with each other, especially as regards deliveries towards the West—that is, towards Belgium. Each of the three companies has published a reduced tariff for transports of 150 tons, at the least, to Belgium. Notwithstanding this, a certain natural distrust seems to exist between Prussian producers and Belgian consumers—a distrust which has of late checked business.

The Charleroi Committee of Foregatherers has taken an important step. The number of blast-furnaces lighted is reduced to 22. Wages will be reduced 10 per cent., and the foregatherers will come to a mutual understanding to seek combustible abroad: first in Prussia, and then, perhaps, in France. The simultaneous extinction of five blast-furnaces will bring on the coal market a rather considerable amount of combustible, which the current demand is not expected to immediately absorb. In the spring it is expected that the extraction of coal in Belgium will become of a less pressing character, and the coal mining companies will in that case be enabled to extend their workings so as to be in a position to respond to the requirements of the following winter. The state of affairs Belgian metallurgy has had to sustain during the last few months was, in fact, intolerable, a fall in pig having occurred almost simultaneously with an advance in coal. In the Centre and in the Liège basin important reductions of wages have been applied, and in the latter group only 11 blast-furnaces are in activity; it is long since the number was so limited. The rolling mills producing rails are provided with orders, which assure them work for a certain time, but no new affair presents itself even in perspective. The construction workshops are in the same position, and some of them which have no important orders to execute are altogether destitute of employment. The Belgian General Water Conduit Company has just concluded a contract with a French company with reference to the distribution of water at Barcelona. The amount of the contract is 200,000l., and the greater part of the metallic work, which the Belgian General Water Conduit Company is to execute, is to be carried out in the establishment which the company possesses at the Venes (Liège). The Courcelles-Nord Colliery Company commenced

the payment on Jan. 15 of interest for 1866, or 1l. per share. The Mulheim-sur-Ruhr Mines Company will meet on Tuesday at Mulheim.

The importations of iron minerals into France during the first eleven months of 1866 amounted to 423,000 tons. Belgium sustained the largest share in this total with 133,200 tons; Algeria came next with 100,200 tons; Italy, with 78,000 tons; Germany, with 57,000 tons; Spain, with 48,900 tons; and England, with 1669 tons, &c. The remainder of the supply was derived from miscellaneous sources. During the same period 125,375 tons of pig metal entered France, of which 55,790 tons were consumed in the country, while 69,585 tons were admitted temporarily. England furnished the greatest part of these imports. Of iron 7200 tons were imported, after payment of duties, while 29,165 tons were admitted free of duty; 12,350 tons of plates were also admitted temporarily. The importations of pig present a diminution of 215 tons, as compared with the corresponding period of 1865; those of iron increased 54 tons, and those of plates also experienced a slight augmentation. The re-exports made after the application of manual labour amounted in the first eleven months of 1865 to 47,890 tons of pig, showing a diminution of 8790 tons, as compared with the corresponding period of 1865; 53,325 tons of iron, showing an augmentation of 17,690 tons, as compared with the corresponding period of 1865; and 12,545 tons of plates, or 2830 tons more than during the corresponding period of 1865. The department which re-exported the greatest quantity of these manufactured products was that of the Bouches-du-Rhône, as well with regard to pig as with regard to iron and plates; the Seine-Inférieure came next as regards all these products, and then came the Haut-Rhin for pig, and the Nord for iron and plates. At St. Didier the market has receded to some extent from the torpor which has prevailed at that centre. Some contracts in charcoal-made pig have been concluded at 45s. 2d., 45s. 7d., and 45s. 10s. per ton. A contract for 200 tons of mixed pig has been concluded at 45s. per ton. An offer has been made of 35,480 tons of pig for coke-made pig of the Meurthe of good quality; producers asked for 35s. 6d., but no important transaction was concluded at that price. Some foregatherers have by common consent reduced the price of iron 4s. per ton; this reduction has enabled them to accept some rather important orders. Prices for rolled iron from charcoal-made pig stand at 95s. 9d. per ton, while mixed iron has made 85s. 12s.; coke-made, 75s. 15s.; and hammered iron, 100s. per ton. In the Moselle group no salient fact has occurred, unless we except the lighting of a large new furnace, constructed by the Noveant Company, and expected to produce 40 tons per day. This is the fifth furnace which the company has in activity; it produces more especially a second fusion pig, which is much esteemed by the founders of Alsace and the Ardennes, to whom it is sold at 45s. 8d. per ton for No. 1, and 45s. per ton for No. 2.

The last advices received from Chili have made some impression on the foreign copper market, and have provoked a certain hesitation, from which there has resulted a temporary check in transactions. At the same time, the situation is, upon the whole, satisfactory. A letter from Havre gives some details on the movement of Chilean during December as well as during the whole of 1865. The writer says:—"Affairs were active in December, and prices have risen 25s. 4d. per ton. This improvement in the state of affairs is due especially to a deficit of from 5000 to 6000 tons of pure copper which the exports of Chilean present this year, as compared with 1865, and to the requirements of consumption. On the other hand, certain sources of supply of secondary importance it is true only yield very little, and even nothing in certain cases. Upon the whole, the general position of the market is considered good; at the same time, the market remains affected by temporary influences resulting from differences in orders, deliveries from producing countries, stock, &c.—influences which are common to all articles. The total sales of the month amounted to 1299 tons, at 75s. to 80s. per ton for disposable, and 77s. to 81s. per ton for deliveries to be made in February, as well as 30 tons of refined at 81s. The present stock on the market is comprised of 24,000 tons of United States, 4900 tons of Chilean in bars and ingots, 109 tons of Chilean minerals, and 100 tons from various sources, making a total of 4674 tons, or of pure copper about 4710 tons, against 4820 tons Nov. 20, 1865." At the commencement of 1865 the stock of Chilean in bars at Havre was 5200 tons, and at the close of the year 3690 tons; at the commencement of 1866 the stock was 2800 tons, and at the close of the year 4700 tons. Prices appear to have attained their maximum in December, 1865, and their minimum in December, 1866. In November, 1865, advices were received of the blockade of the Chilean ports by Spain in May, 1866, the bombardment of Valparaiso became known in Europe, and in June, 1866, the departure of the Spanish squadron from the Chilean coasts was announced. The total imports of copper at Havre in 1866 were as follows:—United States 200 tons, compared with 275 tons in 1865; Chilean 13,570 tons, as compared with 9250 tons in 1865; English, 2850 tons, as compared with 1550 tons in 1865; miscellaneous, 1250 tons, as compared with 300 tons in 1865; and old 212 tons, as compared with 220 tons in 1865. The Paris copper market has continued quiet, although there has been a slight depression in Chilean, which is quoted at 79s. English has made 84s. Little business has been done at Marseilles; the sale is mentioned there, however, of 215 tons of Toka, at 78s. per ton; for consumption prices are fixed at 80s. per ton for Spanish, 94s. per ton for red rolled copper for sheathing, and 86s. per ton for yellow ditto. Affairs have been temporarily checked on the German markets. In consequence of the rather high pretensions of holders, which purchasers will not accept; the article generally maintains former rates. Tin has been advancing on the Dutch markets; 2000 blocks of Banca have changed hands at 52s. 6d., 2500 blocks at 51s. 12d., 1200 blocks at 51s. 12d., 500 blocks at 51s. 12d., 2500 blocks at 52s. 6d., 1800 blocks at 52s. 6d., and 1000 blocks at 52s. 6d. At Rotterdam, 500 blocks have also changed hands at 50s. 10s. to 50s. 12s. The advices from England and Holland have reacted favourably on the tone of the other markets. The demand at Paris is very well sustained; Banca has made 93s., Straits, 91s.; and English, 91s. At Cologne quotations have been firm; at Berlin sales have been active, and prices have displayed an upward tendency; and at Hamburg the article is very well sustained. There have been no important operations in lead and sales have been generally limited to the requirements of consumption. At Paris rough French lead has made 20s., and Spanish, 20s. 8s. per ton. At Rotterdam, Stolberg, Eschweiler, and German lead of various marks have made 11s. 11s. At Marseilles, lead in saumons, first fusion, has made 19s. 2s. per ton in warehouse; lead, in shot and rolled respectively, have brought 21s. 8s. and 21s. 12s. per ton for consumption. According to the advices received from Breslau, the position of zinc has improved in the various districts of Silesia, the approximate production in 1866 having amounted to 650,000 centners, against 500,000 centners in 1865; this difference, coupled with the circumstance that, according to all probability, the production of the current year will be inferior to that of the past, while the stocks in warehouse are very restricted, tells in favour of the future position of the article. At Hamburg no great amount of business has been done; at the same time, the tone of the market is very satisfactory. At Paris the article has been in sustained demand, and prices have been firm; rough Silesian has made 23s. 4s., and lead from other sources 22s. 16s. per ton. At Marseilles zinc in plates re-cast is quoted at 17s. 4s. per ton for consumption, and rolled zinc 32s. per ton.

REPORT FROM SCOTLAND.

GLASGOW, JAN. 23.—The Pig-iron market has been very inanimate since last week, and prices have declined 6d. per ton for cash. The weather being very unfavourable for shipment, and the market being entirely void of all tendency to speculation, contribute to keep things very quiet and depressed. The price of pig-iron is now reduced to such a figure that it can hardly be manufactured with a profit. To go lower would be to sell at a loss; and buyers are as shy in making purchases as if the market were in the hands of speculators, and likely to fall at any moment by some hitch in their arrangements. Trade is also, on the whole, dull, and the state of metals in the South has an untoward influence on this market. In these circumstances our shipments are very circumscribed, 5050 tons being the quantity for the week ending yesterday, against 7385 tons in the same week of last year. To-day, the market flat, with a good many lots offering at 53s. 10d. cash, and 54s. 15d. a month. Small business done at these prices, and at the close buyers offered 15d. per ton less. No. 1, g.m.b. 54s. 6d.; No. 3, 53s. 6d.; Gartsherrie, No. 1, 66s.; Coltness, 65s. Malleable iron is a little more enquired for, and a few more orders are offering than at the close of the year; but business is sluggish in this branch, and so indifferent are some of the makers to commence operations, that they have not yet come to terms with their men, both standing on "stepping stones," which would have been at once relinquished in more prosperous times. Ironfounding is dull, and as a consequence, the brass and copper workers are not fully employed. The shipbuilding trade of the Clyde is also depressed, and while the London operative shipwrights are refusing a reduction of from 7s. to 6s. 6d. a day, the same class of workers cannot find employment on the Clyde at 5s. a day (on an average 4s.), or nearly 40 per cent. less than their London brethren. We do not seek to have work from the Thames to the Clyde, but if the work can be done on the Clyde at a profit, why allow it to go to a foreign land, when it can be profitably undertaken in this country? The Clyde builders are not novices in their trade, and we expect that in material and workmanship they will not be rivalled either on the Continent or in America. The home demand for Coals continues good, but there is no change in the quotations. The colliers on both sides of the Clyde, and about Wishaw, have had their wages reduced 6d. a day, and Mr. McDonald's advice to them is to work a day less a week, and they will thus be enabled to keep up their wages to the maximum of 5s. a day! Thus four days' work at 5s. a day, according to Mr. McDonald's view, will render the colliers and their families more prosperous than with six days a week at 4s. 6d.—that is to say, they will be better off with 20s. a week than with 27s. In order to carry out this noble idea, agitation committees have been appointed to visit the entire mining districts of Scotland, and the funds for the itinerant agitators are to be provided by a levy of 6d. per head per man, which, on (say) 40,000 men, will yield 10000l., which should keep the orators on something better than "bread and water." To-day, the 26th, as good-luck would have it, Mr. McDonald and Lord Elcho are to address the miners of Midlothian, in Dalkeith, on the "Law of Master and Servant." Mr. McDonald is to "go it" first, and his friend, Lord Elcho, is to follow suit. The advice will, in all probability, be a good one, and, perhaps, the brotherly fraternisation will not be so incongruous after all. The shipments of coal during the week was 12,075 tons; in the corresponding week

NEW SOUTH WALES COAL.—Amongst the specimens representing the mineral resources of New South Wales the finest was a column of coal from the Scottish Australasian Mining Company's Lambton pit, showing a thickness of 9 ft. 4 in. The principal specimens were from Stony Creek, East Maitland, and seam 4 ft. 10 in. thick; Rix's Creek, near Singleton, 6 ft. 6 in.; Amy Creek, Brankerton, 6 ft. 6 in.; Dalewood Creek, 6 ft. 6 in.; and Four Mile Creek, East Maitland, 9 ft. 6 in. About 29,000 tons of coal are at present raised weekly in New South Wales.

THE DYLAIS COAL AND IRON COMPANY (LIMITED).
Incorporated, with Limited Liability, under the Companies Act, 1862.
Capital £60,000, in 6000 shares of £10 each.
Deposit £1 per share on application, and £1 further on allotment. Subsequent calls £1 per share, at intervals of not less than three months.
It is estimated that not more than £5 per share will be called up. Nearly half the capital is already taken by the directors and vendors.

DIRECTORS.
HOWEL GWYN, Esq., M.P. for Brecon, Dyffryn House, Neath, Glamorganshire.
W. L. BANKS, Esq., Pontywal Hall, Breconshire (Chairman of the Neath and Brecon Railway, and of the Brecon and Merthyr Railway).
FREDERICK HARRISON, Esq., 15, Carlton Villas, Maida Vale, London (Director of the London and County Bank, London, and of the London and Liverpool and Globe Insurance Company, London).
JOHN J. WILLIAMS, Esq., M.D., Magistrate for the County of Brecon (Director of the Brecon and Merthyr Railway).
GEORGE B. MURLY, Esq., Langport, Somersetshire (Director of the Ilfraval Coal and Iron Company, Limited).
THOMAS C. HINDE, Esq., Ynyspelliweh, near Swansea (Chairman of the Ynyspelliweh Tin-plate Company, Limited; Director of the Ilfraval Coal and Iron Company, Limited).

(With power to add to their number.)
BANKERS—National Provincial Bank of England, Brecon.
Provincial Banking Corporation, Swansea and Neath.
SOLICITOR—Mr. J. R. Cobb, Brecon.
AUDITORS—Thomas Frater, Esq., Manager of the National Provincial Bank of England, Brecon.
Messrs. W. H. Williams and Co., Exchange, Bristol.
BROKERS—The Members of the Bristol Stock Exchange, Bristol.
SECRETARY—Mr. Thomas Cook Davies, No. 2, Mount Street, Swansea.
REGISTERED OFFICE,—2, MOUNT STREET, SWANSEA.

PROSPECTUS.

This company is formed for the purpose of leasing and working the minerals contained in the Onllwyn, and the Rhydfosddu, Cefn-yr-Erw, Castell Coch, and other estates, at the head of the Dyffryn Valley, and situated partly in Glamorganshire and partly in Breconshire.

These properties together form a total area of nearly 1000 acres, all in a ring fence. The Onllwyn property is held for a term of 33 years, and the Rhydfosddu, Cefn-yr-Erw, and Castell Coch Estates for a term of 29 years, at royalties of 8d. per imperial ton on all coal and ironstone, and proportionately low rates for building stone, &c. The dead rents average £1 per acre, and all the leases are determinable by three years' notice at the option of the lessees, but not by the lessors.

The Onllwyn estate consists of nearly 700 acres, and comprises in the section the Upper Four-foot coal, the Eighteen-foot, the Nine-foot, the Lower Four-foot, and other veins, making a total workable thickness of between 30 and 40 feet.

Under the whole of this property are also contained the series of argillaceous limestone belonging to the north-outcrop of the South Wales mineral basin. All the seams of coal and ironstone are fully proved by existing workings, and are shown in the map of the Ordnance Survey. The coal is a pure anthracite, and is admirably adapted for smelting iron, for malting, lime burning, hop drying, and heating stoves. At present it is not largely used in this country for steam purposes, chiefly owing to the defective communications with the districts in which it is found. Recent railway extensions will, however, enable this coal to compete fairly in the markets of the world, and its extraordinary and valuable properties will now, unquestionably, become as well known and appreciated for ocean steam navigation and for locomotive and stationary engines as in the country as they have long been in the United States of America. It is absolutely smokeless, makes little or no ash or clinker, evolves the most intense heat in combustion, and is unapproachable by any other description of coal for strength and durability.

From its great density and hardness, it is admirably adapted for long steam voyages. It is less compact than any other coal in the world, is unaffected by exposure to weather or climate, and is entirely free from all danger of spontaneous combustion or of explosion.

For iron-making purposes it is invaluable: the pig-iron smelted by this coal has long been locally celebrated, and now that through railway routes are coming into operation in the district, it is greatly in demand at high prices in Staffordshire and other parts where first-class pig-iron is needed.

On this property are two well-built blast-furnaces, with six hot-air ovens, powerful blast-engine, five excellent boilers, with chimney stack, &c., complete, foundry, fitting, blacksmiths' and carpenter's shops, offices, storehouses, manager's house, stabling, and about fifty workmen's houses, all let and bringing in rental of upwards of £200 per annum.

There are also five brick works, clay mill, and five other steam-engines, with boilers, pumps, &c., working on various parts of the property, together with trains, weighing machines, and many miles of above and underground rail and tram-roads; also tools, plant, &c., all in use and in working order.

The Rhydfosddu, &c., estates are of great value as ironstone properties, the ore being rich in percentage of iron, and excellent in quality, while the ground is highly productive.

This property is, moreover, so situated that the whole of the ironstone veins crop out on the east side of the vale of Tawe in such a position that for many years they will be got by open working. When it shall be necessary to drive underground, the River Tawe being 200 or 300 ft. below the top of these hills will afford free drainage for an inexhaustible tract of minerals.

The main line of the Neath and Brecon Junction Railway runs through the Rhydfosddu and other properties. These railways have been promoted by the landowners in the district, and the development of these important mineral estates has been carefully seen in view in laying out the line; the capital, consequently, which must otherwise have been expended in opening these tracts will be greatly lessened.

The Neath and Brecon Railway was opened through for goods and mineral traffic on Sept. 13, 1866. The Swansea Vale and Neath and Brecon Junction is being pushed on to the utmost, and it is anticipated that the whole system will be completed throughout during the present year.

Before the completion of these railways these estates had no means of communication other than a defective and expensive tramroad five miles in length, and supplies of limestone for fluxing purposes, &c., were only obtainable by a narrow-gauge railway. By the completion of the Neath and Brecon line the cost of this important material will be reduced between 30 and 40 per cent.

The present owners of the property have agreed to accept £31,500 as the purchase-money, including the whole of the buildings, erections, houses, engines, machinery, and fixed and movable plant; payable one-third in cash, one-third in shares of the company, with one-half (that is, £5 each paid-up) and one-third in debentures of the company, having three years to run, and bearing interest at 5 per cent. per annum. It is anticipated there will be no difficulty in renewing these, if desirable.

It is proposed to call upon the shares issued to the public, at such intervals as may be requisite, £5 per share, thus making them paid-up to an equal amount with the shares taken by the vendors in part payment of purchase-money as above.

The present furnaces are equal to a weekly make of 140 tons of pig-iron, and it is proposed to lay out £6000 in extending the colliery openings sufficiently to supply 200 tons of coal per day for sale, the extraction having hitherto been confined to the purposes of the ironworks.

The cost and prospectus will then show as follows:—

Purchase-money in cash and shares, exclusive of debentures, for which see below	£21,000 0 0
Amount required for extension of collieries	6,000 0 0
Working capital	3,000 0 0
Amount of share capital to be called up at £5 per share	£30,000 0 0
Amount of debentures, interest on which at 5 per cent. is deducted from profits, as below, £10,500.	

PROFITABLE.

140 tons pig-iron weekly, say 7000 per annum, at 7s. 6d. per ton profit £2625 0 0

100 tons coal per day, say 300 days per annum, at 2s. per ton profit, 6000 0 0

Total £8225 0 0 |

Less interest at 5 per cent. on £10,500 debentures, as above 525 0 0 |

Yearly profits £8100 0 0 |

Thus showing a profit of upwards of 25 per cent. per annum, without taking into account the income from rents and other sources.

These calculations have been carefully considered and verified by practical ironmasters and mining engineers personally acquainted with the locality, and the directors are satisfied that the above estimate of profits is considerably understated.

No promotion money will be paid, nor any expenses incurred, except those which are strictly legal and necessary.

If no allotment be made, the deposit money will be returned in full.

Prospectuses and forms of application may be obtained of any of the directors, or of the bankers, solicitors, auditors, or brokers of the company; and abstracts of the lease, with plans and further particulars of the property, and copies of the Memorandum and Articles of Association may be seen on application to the Secretary, at the company's offices, No. 2, Mount Street, Swansea; or at the offices of Mr. J. R. Cobb, Solicitor, Brecon; or of G. B. MURLY, Esq., Langport, Somersetshire, Nov., 1866.

EAST HOLYFORD MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—I have just seen a letter in last week's Journal, signed "E. Harvey Wadge," and which contradicts the statement I made in a previous number of your Journal, to the effect that I was neither director nor shareholder of the above mine.

I am glad to perceive that Mr. Wadge intends to return to England, that the matter may be investigated. I pledge myself to meet him before the shareholders or before a court of law, and explain fully the part I took in the East Holyford Mine.

My first introduction to Mr. Wadge was his calling on me, as a college student, to read for entrance under me. My avocations render me entirely unacquainted with business, and from the style in which Mr. Wadge lived, I had no more doubt of his solvency and respectability than I should have of the chairman of any of our railway companies.

Mr. Wadge pressed on me to accept 25 shares in the company. I did so, but the same evening withdrew my consent—in proof of which I submit, for Mr. Wadge's consideration and the public's, an extract from a letter of his to me, also a telegram (a copy of the telegram can be seen at the office), and anyone can see the letter.

1.—"Aug. 3, 1866.—DEAR MACNALLY:—I will omit your name from any prospectus of East Holyford, as you wish."

2.—"Telegram, Nov. 6, 1866.—"Alexander Hotel, Hyde Park, London:—I will write you a letter to-night, stating my regret for having put your name without your consent. That will do, I am satisfied."

Wesley-place, Dublin. Your obedient servant, THOMAS MACNALLY, Clerk.

PETROLEUM IN ITALY.—I hereby give notice that Mr. HENRY FAIRMAN, of London, is the ONLY PERSON whom I have AUTHORIZED to ATTEND to all MATTERS concerning myself with respect to my RECENT DISCOVERIES of PETROLEUM IN ITALY.

Referring to the above advertisement, I beg to request those friends who have bespoken shares in the ITALIAN PETROLEUM ENTERPRISE, now forming in 300 shares of £10 each (limited), to acquire and further develop a portion of the above referred to properties, with a view to purchase the whole thereof after approval, to be so kind as to pay in their deposit of £5 per share to the bankers without delay, as the subscription list will close on the 6th proximo. Should any friend have mislaid his prospectus, another will be sent to him on application to FREDERICK BRADLEY, Esq., Solicitor, 127, Fenchurch Street, E.C.

CLERK WANTED, at a small ENGINEERING ESTABLISHMENT and IRON MANUFACTORY. Must be a good accountant, and have a thorough knowledge of bookkeeping by double entry. One who has held a similar situation and possesses some knowledge of the business will be preferred. Apply, by letter only, with full particulars of qualification, age, experience, and salary expected.—Address, "I. J. and Co.," Messrs. Horn and Grey Street, Newcastle-on-Tyne.

WANTED.—A RE-ENGAGEMENT as COLLIERY MANAGER. Many years' experience and first-class testimonials. No objection to go abroad.—Apply to "H. M.," MINING JOURNAL office, 26, Fleet Street, London, E.C.

THE LESSEE of a VALUABLE BRITISH COPPER MINE, on which there is the requisite plant, and from which many thousands of pounds worth of rich ores has been raised, WISHES to MEET with a PARTY who could get the REQUISITE CAPITAL THOROUGHLY to DEVELOP the MINE.—Apply by letter, to "P. A. R.," MINING JOURNAL office, 26, Fleet Street, London, E.C.

TO IRONMASTERS.—The ADVERTISER, who has had many years' experience in manufacturing M. bars, angles, plates, sheets, hoops, and rails, is NOW OPEN for an ENGAGEMENT as OUT-DOOR MANAGER. Good reference will be given. No objection to go abroad.—Apply to "A. B.," MINING JOURNAL office, 26, Fleet Street, London, E.C.

A GENTLEMAN having an extensive connection with merchants manufacturers, and others, would be GLAD to UNDERTAKE the SALE of PATENTED ARTICLES or INVENTIONS, upon commission.—Apply to Mr. W. T. RAWLE, patent and mining agent, 8, Small Street, Bristol.

SLATE QUARRY IN WALES.—A MANAGER is REQUIRED to UNDERTAKE the SUPERINTENDENCE and DIRECTION of a FIRST-CLASS SLATE QUARRY. He must possess practical knowledge and experience, with a good knowledge of machinery, and be enabled to produce satisfactory testimonials, copies of which must be forwarded with the application. A liberal salary will be given.

Apply, by letter only, to "A. B.," MINING JOURNAL office, 26, Fleet Street, London, E.C.

SLATE QUARRY—LLANFAIR GREEN AND BLUE. FOR SALE, SIXTY SHARES (limited to £5 a share, and on which £3 10s. has been paid), at £1 per share. Address, "N. K. H.," MINING JOURNAL office, 26, Fleet Street, London, E.C.

NOTICE TO QUARRY INVESTORS.—Mr. JOSEPH KELLOW, SLATE QUARRY INSPECTOR and PRACTICAL ENGINEER (twenty-five years of practical experience), takes this opportunity of informing his friends and public companies generally, that he has CHANGED his RESIDENCE from Nantlle Vale, Carnarvonshire, North Wales, to TREMADOC, in the same county. All orders will receive prompt attention. Private shareholders advised. Terms reasonable.

FOR SALE, BY TENDER, BILLIA CONSOLS AND REETH CONSOLIDATED MINES SETTS and MATERIALS, situated in the parishes of Towardack and Ury Leland, in the county of Cornwall, consisting of—ONE 36 in. PUMPING ENGINE, with 10 ton BOILER, nearly new. ONE 22 in. WINDING ENGINE, with 8 ton BOILER, nearly new. ONE 27 in. STAMPING ENGINE, with 8 ton BOILER, lifting 36 heads. About 300 fms. pitwork, 11 to 15 in., and all the necessary materials for working the mine.

The mines are parallel to and adjoining Wheal Reeth, and afford a rare opportunity to capitalists. Sealed tenders, marked "Tenders for Reeth Consols Mine," should be addressed to Mr. JAMES B. COULSON, Penzance, on or before Saturday, the 16th February next, soon after which the purchaser will have notice thereof. For particulars, apply to Capt. R. BLIGHT, at the mine.

Not bound to accept the lowest or any other tender. Dated Penzance, January 9, 1867.

FOR SALE, an excellent CORNISH PUMPING ENGINE, made at the Penryn Foundry, 48 in. cylinder, works to 70 horse power, stroke 8 ft. 6 in. in shaft, 9 ft. in cylinder, with 13 ton balance beam, and TWO TUBULAR BOILERS, 30 ft. long, 5 ft. 6 in. diameter. Also, about 140 fms. to 150 fms. of 11 in. PUMPS, with 10 in. working barrel, &c., and 135 fms. pump rods. The engine, &c., may be seen at the Old Lead Mine, Crick, near Whatstandwell station on the Buxton Railway.—Apply to WALKER COX, Esq., Derby; or EDWARD COCKBURN, Albert Street, Rugby.

TO BE SOLD, cheap, a PORTABLE ENGINE of 14 horse power, double cylinder, of first-class construction, workmanship, and material. Winding gear to order. SECOND-HAND PORTABLES FOR SALE.—Apply to MESSRS. BARROWS and CARMICHAEL, engineers, Banbury, Oxford.

PORT PHILLIP and COLONIAL GOLD MINING COMPANY.—Incorporated by Royal Charter. Notice is hereby given, that the ORDINARY GENERAL MEETING of the shareholders of this company will be HELD at the London Tavern, on TUESDAY, the 29th day of January, 1867, at Two o'clock precisely. In pursuance of the Deed of Settlement.

By order, C. H. FIELDER, Secretary. Offices, 35, Bucklersbury, London, E.C., Jan. 18, 1867.

VICTORIA (LONDON) MINING COMPANY (LIMITED).—Notice is hereby given, that the ORDINARY GENERAL MEETING of the shareholders of this company will be HELD at the London Tavern, Bishopsgate Street, in the City of London, on TUESDAY, the 29th day of January, 1867, at Twelve o'clock noon precisely, for the following purposes:—

To receive and consider a report of the proceedings of the company, and a statement of the accounts since the last ordinary general meeting. To elect directors in the place of A. T. Thomson, Esq., and A. Cobbett, Esq., who retire by rotation, and offer themselves for re-election. To elect auditors for the ensuing year.

By order, C. H. FIELDER, Secretary. Offices, 35, Bucklersbury, E.C., Jan. 19, 1867.

EDUCATION IN COLLIERY ENGINEERING, MINERAL SURVEYING, &c.—Mr. M. GILDROY STEWART, M.E., SHERIDAN HOUSE, WARMLEY, near BRISTOL, has at present VACANCIES for TWO or THREE PUPILS. Terms very moderate.

ANALYSES of COAL, CANNEL, MINERAL OILS, and all OIL PRODUCING MINERALS are UNDERTAKEN by A. NORMAN TATE, F.R.S.E., &c., ANALYTICAL and CONSULTING CHEMICAL ENGINEER (Author of "Petroleum and Its Products," &c.), MOLD, NORTH WALES.

Plans and estimates for oil and chemical works prepared, and their erection superintended. Assays of metals and their ores carefully conducted.

TO COAL OWNERS, AND OTHERS.

THE LONDON PATENT COAL COMPANY are now GRANTING LICENSES for the USE of their PATENT for the UTILIZATION of COAL DUST. All communications to be addressed to the Managing Director, 26, Martin's Lane, Cannon Street, E.C.

Second yearly dividend and bonus to shareholders declared December, 1866. A dividend at the rate of 4 per cent. per annum. A bonus at the rate of 4 per cent. per annum.

Additional bonus dividable among shareholding consumers, 4 per cent. of the whole profits, being a return of 10 per cent. upon the coal purchased.

THE JOINT-STOCK COAL COMPANY (LIMITED).—Incorporated under the Companies Act, 1862, by which the liability of each shareholder is limited to the amount of his shares.

Capital £100,000, in 100,000 shares of £1 each. First issue of 50,000 fully subscribed; 25. per share to be paid on application, 25. on allotment, and the remainder, if required, in calls of not less than 25. per share, at intervals of not less than three months.

CHAIRMAN—JOHN WHITE ORAM, Esq. **MANAGING DIRECTOR**—FREDERICK A. NEW, Esq. **BANKERS**—The London and County Bank, Lombard Street; and Metropolitan and Provincial Banks.

Chief Office 45, Fleet Street, E.C. **West End** 127, Great Portland Street. **Dublin** 9 and 10, City Quay. **Liverpool Office** 43, Castle Street. **Colchester** Hythe Quay. **Brighton** 41, Ship Street.

The company is now in full operation, having seven depots in London, also depots and wharves at Dublin, Liverpool, Colchester, and Brighton. The directors are also supplying trucks of coal to the various stations in the Eastern Counties, Home Counties, and also on the south line of rails. To supply their trade promptly and independently, the company has in constant working order 300 railway trucks, and also owns a large stock of horses and vans in excellent condition.

The liability of shareholders is limited to the amount of shares taken. From the rapidity with which the first issue of 50,000 shares was subscribed, and the applications already on hand, the directors anticipate being obliged at an early period to close the share list for the second issue.

Applications for detailed prospectuses and shares to be made to the managing director at the offices or depots of the company.

NICHOLLS, MATHEWS, AND CO., ENGINEERS, BEDFORD IRONWORKS, TAVISTOCK. MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION. ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, MATHEWS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

PATENT FLEXIBLE TUBING, AND BRATTLE CLOTH FOR MINES, MANUFACTURED BY ELLIS LEVER, PATENTEE, WEST GORTON WORKS, MANCHESTER.

RAILWAY CARRIAGE COMPANY (LIMITED) ESTABLISHED 1847. OLDBURY WORKS, NEAR BIRMINGHAM. MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK. Passenger carriages and wagons built, either for cash or for payment over a period of years. RAILWAY WAGONS FOR HIRE. CHIEF OFFICES, OLDBURY WORKS, NEAR BIRMINGHAM. LONDON OFFICES, 6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE BEVERLEY IRON AND WAGON COMPANY (LIMITED). MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, WROUGHT and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED IRON, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS of PORTABLE FARM RAILWAYS, TURN-TABLES, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINISTS. MANUFACTURERS of FIELD, ROAD, and BARN IMPLEMENTS, PATENT LORRY, CART, and CARRIAGE WHEELS, with WOOD or IRON NAVES. REAPING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for home and foreign RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c. IRONWORKS BEVERLEY, YORKSHIRE. JAMES DEWHIRST, Sec.

THE BIRMINGHAM WAGON COMPANY (LIMITED) MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract. EDMUND FOWLER, Sec.

WAGON WORKS, SMETHWICK, BIRMINGHAM. ** Agents received on Debenture; particulars on application. London Agent—Mr. E. B. SAVILE, 67, Victoria Street, Westminster, S.W.

STAFFORDSHIRE WHEEL AND AXLE COMPANY (LIMITED). MANUFACTURERS of RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK, used in the CONSTRUCTION of RAILWAY ROLLING STOCK. CHIEF OFFICES, 3 and 4, EXCHANGE BUILDINGS, BIRMINGHAM.

SAXBY and FARMER PATENT RAILWAY SIGNALS.—CAUTION.—WHEREAS, in 1856, LETTERS PATENT were GRANTED to JOHN SAXBY, for his ORIGINAL INVENTION of LOCKING APPARATUS to PREVENT ACCIDENTS at RAILWAY JUNCTIONS; and in 1858 and 1860 further Letters Patent were granted to him for improvements upon such invention; and Messrs. SAXBY and FARMER, PATENT RAILWAY SIGNAL ENGINEERS and MANUFACTURERS, of KILBURN, in the county of MIDDLESEX, are now the SOLE PROPRIETORS of THESE PATENTS, as well as of a patent granted to Austin Chambers, dated 5th January, 1860, and to Latimer Clark, dated 14th February, 1859; and of late various signalling apparatus have been advertised or made which are infringements of the above or of some or one of the above-mentioned patents.

ALL PERSONS and COMPANIES are HEREBY CAUTIONED AGAINST MAKING, VENDING, or USING ANY such SIGNALLING APPARATUS which are INFRINGEMENTS of the BEFORE-MENTIONED PATENTS, or some or one of them; and notice is hereby given that they will be held responsible for any such infringement.

GEORGE FAIRFELL, SON, AND COODE, 2, Whitehall Gardens, Westminster, S.W. (Solicitor for Messrs. Saxby and Farmer). Dated the 18th January, 1867.

BOWLING IRON COMPANY, BRADFORD, YORKSHIRE. BEST CRUCIBLE CAST-STEEL TYRES, AXLES, CRANK AXLES, BOILER PLATES, Also COG WHEELS, and other CASTINGS.

This company is prepared to furnish the above-mentioned articles in CAST STEEL of a very superior quality, made principally from their own well-known "BOWLING IRON."

Also BOWLING WROUGHT-IRON SOLID WELDLESS TYRES, of any size and to any section.

BAGILLT OIL COMPANY (LIMITED), FLINT. MANUFACTURERS of BLACK GREASE FOR COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £3 PER TON. TORCH and LAMP OIL, 1s. PER GALLON (Casks free). LUBRICATING OIL, 1s. PER GALLON (Casks free).

STEEL! STEEL! STEEL!!! JOHN TURNER, SHEFFIELD, AND STOCKTON-ON-TEES, MANUFACTURER of SUPERIOR REFINED CAST STEEL for MINERS' DRILLS.

CUP and TURNING TOOLS, price and quality not surpassed. Try one bar, delivered free at manufacturers' prices. J. TURNER keeps in stock all kinds of tools suitable for engineers, mining purposes, and shipbuilders, at the Stockton depot, where all communications are requested to be sent.

INEXPLOSIVE BLASTING POWDER (Invented by G. A. NEUMEYER) CANNOT EXPLODE WHEN EXPOSED TO AIR!

ALL INTERESTED IN COLLIERY, MINING, AND ENGINEERING OPERATIONS are invited to TEST this NEW EXPLOSIVE COMPOUND, which meets with great favour upon the Continent, where it has been introduced nearly TWO YEARS.

This powder combines STRENGTH with SAFETY to a degree never before known. It is more economical than ordinary blasting-powder:—

1.—Because it is cheaper in the first cost.
2.—It is lighter than the blasting-powder now in use.
3.—It is lighter than the blasting-powder now in use.

Edwin H. NEWBY is now prepared to register orders for the above. Particulars, post free, on application to the offices, 39A, King William Street, City, London.

GLAHOLM AND ROBSON, HENDON PATENT ROPE, SUNDERLAND. MANUFACTURERS of ALL DESCRIPTIONS of STEEL, IRON, and HEMP ROPES for COLLIERIES, SHIPS, &c.

Swan Rope Works. **GARNOCK, BIBBY, AND CO.,** CHAPEL STREET, LIVERPOOL. MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.

MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER and THIRTY PER CENT. CHEAPER than Russian hemp rope. WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH.

Patent Flat and Round Wire and Hemp Ropes, &c. **JOHN AND EDWIN WRIGHT, PATENTEES,** CITY OFFICE, 19, LONDON STREET, E.C.

ESTABLISHED 1770. Manufacturers of every description of IMPROVED PATENT FLAT and ROUND WIRE ROPES, From the very best quality of charcoal iron and steel wire.

PATENT FLAT and ROUND HEMP ROPES. SHIPS' RIGGING, SIGNAL and FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel), WIRE, HEMP, FLAX, ENGINE YARN, COTTON WASTE, &c.

UNIVERSITY WORKS, MILLWALL, POPLAR, LONDON. UNIVERSAL WORKS, GARRISON STREET, BIRMINGHAM. No. 2, OSWALD STREET, GLASGOW.

CITY OFFICE, No. 19, LONDON STREET, LONDON.

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES, MONTGOMERYSHIRE (late manager of the Brynastig and Cwm Ffynnon Mines, and others, in Shropshire and Wales), is NOW OPEN to INSPECT and faithfully REPORT UPON ANY LEAD MINE in either of these localities that may be confided to his care, having had better than 30 years' experience in lead mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Montgomeryshire.

SOUTH FOWEY CONSOLS COPPER MINE, Situate in the parish of FYWARDREATH, CORNWALL.

On the Cost-Book System, which possesses all the advantages of the Limited Liability, without its fines, penalties, and winding-up cumbersome processes, any shareholder can, at any time, terminate his liability by a written notice to the purser.

Deposit on application, 5s. per share; payment on allotment, 5s. per share; all to go towards the general expenditure of the mine.

Future calls to be made as required.

DIRECTORS.
The Rev. Dr. TREFFRY, Place, Fowey, Cornwall.
ROBERT THOMAS HEAD, Esq., The Briars, Exeter.
EDWARD LAMBERT, Esq., 28 York-terrace, Regent's-park, London.
E. W. BRYDGE WILLIAMS, Esq., Nankivel, St. Columb, Cornwall.
WILLIAM WEST, Esq., Tradenham House, St. Blazey, Cornwall.
W. S. SUTTON, Esq., Brighton.

(With power to add to their number).
BANKERS.
Messrs. Roberts, Lubbock, and Co., Lombard-street, London.
Messrs. Williams, Treffry, West, and Co., South Cornwall Bank, St. Austell.

SOLICITORS.
R. W. Head, Esq., Exeter; and
Messrs. Hampton and Bargin, 8, John-street, Bedford-row, London.
PURSER—Mr. William Polkinghorne, Woodlands, Par Station, Cornwall.
MANAGER—Capt. Francis Puckey, St. Blazey, Cornwall.

LONDON AGENT—Jehu Hitchens, Esq., St. Michael's House, Cornhill, London.

PROSPECTUS.

This sett extends nearly a mile in length from east to west, and half-a-mile in width from north to south, having on the south-west Par Consols, and on the north-east Fowey Consols, which mines have been two of the most productive in Cornwall, having yielded upwards of three million sterling in copper and tin ores, giving profits to the shareholders of more than four hundred thousand pounds.

A shaft, already sunk in the western part of the sett could be immediately made available, and when the water is drawn therefrom copper ores could be at once raised.

Twelve highly promising copper lodes have been discovered within the sett, from two of which, some years since, a quantity of copper ore of good quality was raised and sold; but from want of sufficient capital, these and the other lodes were not explored.

It was always the intention of the late enterprising and successful miner, Joseph Thomas Treffry, Esq., to have properly developed this mining property. The Cornwall Railway, passing through the property, Par Station adjoins it, and Par Shipping Harbour is about a mile distant; hence the produce of the mines and all necessary stores can be conveyed at comparatively very little expense, which are advantages of great importance.

Several working miners, who have been employed in the adjoining mines for many years, think so highly of the sett that they have subscribed for shares, and paid the deposit thereon; moreover, a large amount is promised to be subscribed for by inhabitants of the neighbourhood; this is a proof of the high opinion held by those who best know the ground.

Leases for 21 years have been secured within the last year on advantageous terms, the dues ranging from 1-18th to 1-16th.

It is intended by mutual arrangement with the Fowey Consols Mine adventurers to unite with their sett, with a view of further developing several very promising lodes, which are known to exist in maiden ground. In the Fowey Consols shallow levels. By this arrangement the shareholders of Fowey Consols agree to suspend the old and deep workings of their mine, and to make over their right and interest in the present sett and machinery to the new company, of which they will form a part to the extent of £5000 (the value of the said sett and machinery), to be apportioned to them respectively in shares in the new concern, according to their several proportions of the said £5000.

By such scheme the South Fowey Consols Copper Mining Company will have the important possession of the Fowey Consols present pumping power, and will ensure to themselves the great advantage of having an abundant supply of water at an annual rental for the various operations of stamping, winding, crushing, &c. This will save an enormous expense.

With an additional capital of £12,000 to the £5000 above referred to, it is considered that the mine can be properly developed, and from the outlay of which, or such portion thereof as may be required, it is confidently expected that early and large profits will be the result.

Fowey Consols property (besides the different mining deeds, some of which having 19 years unexpired) consists of an excellent so-in pumping-engine, three steam winding-engines, two hydraulic engines, several large water-wheels, crushers, blazing machines, and an immense quantity of pitwork, besides all other requisite materials connected with an extensive mine.

Prospectuses, and further information, may be obtained of the solicitors, purser, or London agent.

Application for shares to be made, accompanied by the deposit of 5s. per share, to the purser or to the London agent, and the issue of this prospectus.

REPORTS.

South Cornish Mine, Liskeard, Nov. 17, 1866.—Having been one of the principal agents of the Fowey Consols Mines for 18 years, which join the ground intended to be worked by the above company, I know the whole sett well, and that there are several very promising lodes contained in it that are well deserving of vigorous development, and if that is done, my firm belief is the parties will be well remunerated for their outlay. **PETER CLYMO.**

Sedgemoor, Kingston-on-Thames, Oct. 27, 1866.—The mining ground, for the exploration and working of which it is proposed to form a company of association, under the title or denomination of the South Fowey Consols Copper Mining Company, is situated south of and immediately contiguous to the well-known, and for a long period largely productive, Fowey Consols Mines, and contains several large and, with one or two exceptions, hitherto untried lodes of considerable promise; and from my personal knowledge of the ground in question, and taking into account the facility with which it can be explored to a satisfactory extent, at a comparatively small expense, by means of water power obtainable from the adjoining mines, which I presume will render it unnecessary to have recourse to steam-power, and bearing in mind also the highly mineraliferous character of the district, I have no hesitation in stating that I consider it to be an excellent speculation for the investment of capital, and that if explored in an effectual and systematic manner, and with a due regard to economy, there is, in my opinion, every probability of its becoming within a reasonable period, remuneratively productive. **JOHN PETERICK.**

St. Blazey, Nov. 12, 1866.—This extensive mining sett is situate in the parish of Fywardreath, and joins the southern boundary of Fowey Consols Mine. It is a very promising piece of mineral ground, containing numerous lodes parallel with Fowey Consols lodes, and which lodes have been so very productive in Fowey Consols Mine particularly at the shallow levels. These lodes are of the most favourable character for producing rich bunches of copper ore, being embedded in a beautifully mineralised stratum of killas, and in the direct parallel line of productive mineral-bearing ground, situate between the Fowey Consols and Par Consols Mines, and which two mines have yielded enormous quantities of copper and tin ores, and thereby given immense profits to the shareholders. The western part of the sett also contains "Sawley" Mine, which is sunk to the 80 fm. level, but only worked to a small extent, and on one lode. The lode is large, and produced a large quantity of copper ore. The lodes above referred to, and which I recommend being worked, are both north and south, and within a short distance of the one worked on in Sawley's Mine, and of equal promise for producing rich bunches of copper ore. These lodes and branches of various sizes, and 12 in number, have been intersected by driving an adit northward from the valley below. Some of them are of an exceedingly promising character, for lodes seen at such a shallow depth, being only a few fathoms below the surface, where they have produced rich bunches of copper ore. For the effectual working of these lodes in the southern portion of the sett, I recommend a good engine-shaft being sunk in the central part thereof. But for the development of this valuable mineral property, I would most strongly recommend its being worked in conjunction with the shallow levels of Fowey Consols sett, as very great advantages would unquestionably be derived therefrom. I also recommend the abandonment of such portion of the deep workings of Fowey Consols Mines as are not at present remunerative, and then confine operations to the shallow levels; more particularly those in the south part of the sett, and where two good shafts—viz., "Hodge's" and "May's"—have been sunk perpendicularly as deep as the 100, and cross-cuts driven therefrom at the 80 fm. level into the southern or new sett; the said cross-cuts have not been extended sufficiently far south to cut the principal south lodes seen at the 40 fathom level. These shafts are only about 45 fms. north of the boundary, and are in a good position for working several lodes to a very great depth. The striking advantages of uniting with the south part of Fowey Consols would be that the north lodes of the south or new sett could be worked from "Hodge's" and "May's" shafts, from the cross-cuts above referred to, and at deeper levels, with considerably less expense than from elsewhere, as, from their underlie, the lodes are always dipping or inclining northward towards these shafts. Another very important consideration is that the valuable plant, engines, and other machinery of Fowey Consols could be at once made available in carrying out the aforesaid objects, besides which the large and powerful stream of water which is now used for working hydraulic engines in the deep part of the old mine eastward, could be diverted therefrom, and made applicable for working a water-wheel at the new shaft, and which would obviate the necessity of erecting a new steam-engine for the speedy development of the several lodes referred to. These advantages I consider to be more than ordinary, and from the locality and mineral-producing character of this new south ground, I am of opinion that, with sufficient capital to prove the mine, combined with perseverance and economy, the shareholders will be well remunerated for their outlay, and that it will prove a lasting and profitable mine—indeed, I do not know a better speculation in the county of Cornwall. **FRANCIS PUCKEY.**

Managing Agent, Fowey Consols, Par Consols, and Cuddra Mines.

Dolcoath Mine, Camborne, Dec. 11, 1866.—This sett lies immediately to the south of Fowey Consols, which has been so very productive for a long period, and is in the same geological formation. Several lodes have been discovered in the sett, one of which is said to have been worked on to the depth of 80 fathoms below adit, and to have produced considerable quantities of copper ore. Some of the other lodes have only been seen in the adit level. We understand that it is proposed to work the sett in connection with Fowey Consols, which will be a great advantage, as that mine is sunk to a great depth, and provided with ample machinery for pumping, &c., so that cross-cuts can easily be extended into the new sett to intersect several of the lodes. Looking at the position of the mine, and at all the circumstances in connection therewith, we consider it to be a speculation of no ordinary promise, and one which is likely, if extensively worked, to be profitable to the adventurers. **CHARLES THOMAS & SON.**

In addition to the above reports, there are several others open for inspection from different mine agents and old tributers; but it is considered enough has been said, and the authorities quite sufficient, to show the importance of this undertaking.

ROBERT LIBBY AND SON,
MINE AND SHAREDEALERS,
CAMBORNE, CORNWALL.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

PURSUANT to an Order made in the Cause of Martyn v. Hambly, the CREDITORS in respect of MULBERRY HILL MINE, in the parish of Lanivet, within the said Stannaries, are, on or before the 9th day of February next, to COME IN and PROVE THEIR DEBTS before the Registrar of the said Court, at his office in Truro, or in default thereof they will be peremptorily excluded the benefit of the said Decree.

Dated Registrar's Office, January 24th, 1867.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NEW WENDRON CONSOLS MINING COMPANY.—The Registrar of this Court has appointed Friday, the 1st day of February next, at Eleven o'clock in the forenoon, at the Registrar's Office, at Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made up and deposited at the said office.

WM. MICHELL, Registrar of the said Court.
Dated the 23d day of January, 1867.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NEW WENDRON CONSOLS MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on Monday, the 4th day of February next, at Eleven o'clock in the forenoon, or in default thereof they will be excluded from the benefit of any distribution made before such proof.

And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

WILLIAM MICHELL,
Registrar of the above-named Court, Truro, Cornwall.
Dated Truro, the 23d day of January, 1867.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL WILLIAM MINING COMPANY.—TENDERS will be received by the Registrar of the Vice-Warden's Court, at Truro, until Saturday, the 9th day of February next, stating the highest price which will be given for the MINE SETT or GRANT, and the whole or any part of the MACHINERY, MATERIALS, and OTHER EFFECTS at WHEAL WILLIAM MINE, near Looe, in the parish of Lanivet, viz.:—

ONE 22 in. cylinder STEAM ENGINE, 6 ft. stroke, and fly-wheel.
ONE BOILER, 8 tons; 16 head iron stamps, axle with 15 heads; round buddle gear and launders; new stamps, guides, heads, &c.; 6 ft. 11 in. pumps; 1 11 ft. 10 in. working barrel; 1 5 ft. 10 in. doorpiece and door, 1 9 ft. 10 in. windbox, 30 fms. iron rods, bucket rods and bucket, flange pins, pulleys and stands; balance-bob and rod; shaft bob and main rod; sweep rod, swords, &c.; several fathoms of launders, whim chain, tackle, kibbles; 3 fm. ladder, and sundry timber and iron.

For inspection, apply to Mr. JNO. TUCKER, in charge thereof.
RODGE, HOCKIN, AND MARRACK, Solicitors, Truro.
Dated Truro, January 24th, 1867.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WEST WHEAL PROSPER MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Tuesday, the 5th day of February next, at Eleven o'clock in the forenoon, at the WEST WHEAL PROSPER MINE, in the parish of Lanivet, within the said Stannaries, in lots, the MINE SETTS or GRANTS or the said company, and the undermentioned MINING MACHINERY and MATERIALS, viz.:—

ONE 30 in. ROTARY STAMPING ENGINE, with fly-wheel.
ONE 10 ton BOILER; 48 heads of stamps; stamps guides, frames, plunger lift, shaft bob and rod, several new iron stamp axles, 44 iron lifters, 2 new cranks, new dressing floors, 3 saddles and 5 plunger blocks, water-wheel for driving biddles, 6 round biddles; wood launders, with stands of various sizes; 2 racks, 1 large tin hatch, wire-rope cage for letting down tram wagons, sundry cast-iron heads and tappets, tram wagons, new wagon wheels, ladders, and other articles. Account-house and office furniture.

For further particulars, apply to Mr. JAMES, Solicitor, Brynffynon Offices; or to the Auctioneers, Temple Chambers, Wrexham.
Dated Registrar's Office, Truro, January 23d, 1867.

IMPORTANT SALE OF MACHINERY AND OTHER EFFECTS AT BERSHAM COLLIERY, NEAR WREXHAM, DENBIGHSHIRE.
(Under a distress for rent.)

MESSERS. BAUGH AND JONES have been instructed to offer for unreserved SALE, BY AUCTION, upon the premises of the Bersham Colliery (about one mile from the town of Wrexham), on Tuesday, February 5, 1867, subject to conditions, the following very VALUABLE MACHINERY and EFFECTS—viz., TWO COUPLED HORIZONTAL ENGINES, so-so power, with winding shaft and gearing, fly-wheel, breaks, &c.; TWO DOUBLE-FLUED BOILERS, 30 feet long by 6 feet in diameter, with furnace doors, bars, &c., complete; small DONKEY ENGINE, for filling boilers (all quite new), by Messrs. H. and J. Ellis, engineers, Manchester; pit-head, complete; large iron crane, with chains attached; quantity of iron pit tubing; smith's bellows, anvils, vice, and an assortment of smith's tools; new and old iron; two new steam register gauges; quantity of planks and boards; cart wheels, barrows, brick moulds, tables, benches, and blocks; carpenter's bench, ladder, grinding stone, quantity of oak pit curbs, chain ropes, spades, mattocks, and sundry other articles and effects.

For further particulars, apply to Mr. JAMES, Solicitor, Brynffynon Offices; or to the Auctioneers, Temple Chambers, Wrexham.

Sale at Eleven for Twelve o'clock punctually.

N.B.—There is every probability that the purchaser of the above machinery may be able to treat with the owners of the minerals to lease the working of this colliery.

The Bersham Colliery is close to the main line of the Great Western Railway, and is, from its position, unrivalled in the district, either for local sale or for transmitting to the neighbouring markets and to Birkenhead for exportation.

On the north-west side of it are the Vron and other collieries of the Wrexham district, and on the south side, and close to it, are the Bryn-y-owen and Hayd-y-bwch collieries of the Rhondda district, all in active operation; and no doubt exists that all the several seams of coal abounding in each of those districts will be found workable under the lands belonging to this colliery.

GLAMORGANSHIRE.

SALE OF A VALUABLE COLLIERY.

MR. ROBERT EVANS WILL SELL, BY AUCTION, in One Lot, by order of the mortgagees, at the Angel Hotel, Cardiff, on Wednesday, the 6th day of February, 1867, at Two o'clock in the afternoon precisely, a VALUABLE COLLIERY, known as—

THE GILVACH COLLIERY.

In full working order, situate in the parish of Llantrisant, in the county of Glamorgan, about 17 miles from Cardiff, comprising the VALUABLE SEAMS of COAL known as the Nos. 2 and 3 Seams, Rhonda Valley, the Abergorky Seams, and the Steam Coal Seams and other MINERALS lying under the Gilvach and Trane Estates, containing about 440 acres, and held on lease for terms of which 55 years, or thereabouts, are unexpired, at moderate royalties.

The Gilvach extension of the Ely Valley branch of the South Wales Railway runs through the property, placing the colliery in direct communication with Cardiff Docks, and with the Great Western Railway.

All the necessary works and appliances, including manager's house, several cottages and buildings, have been erected, and very commodious railway sidings, tipping stages, and roads formed.

The colliery has been thoroughly opened (the No. 2 Seam by free level, and the No. 3 Seam by engine shafts), and is capable of now producing about 200 tons per day, which may be greatly increased.

The No. 3 seam is one of the best coals known for coking purposes.

Particulars and conditions of sale, with plans, may be obtained of W. TUCKER, Esq., solicitor, 4, King-street, Cheapside, London; or at the principal Inns at Cardiff, Newport, Bridgend, and Swansea; and of Mr. ROBERT EVANS, land agent and auctioneer, Bridgend.

GLAMORGANSHIRE.

VALUABLE COLLIERIES FOR SALE NEAR NEATH.

MR. THOMAS THOMAS WILL SELL, BY AUCTION, at the Castle Hotel, Neath, on Thursday, February 7, 1867, at Four o'clock in the afternoon, subject to conditions of sale to be then produced, all those COLLIERIES, with the VEINS, MINES, and SEAMS of COAL, and other MINERALS held with the same, commonly called and known by the name of

BRITHDIR, CWMUD, AND COURT HERBERT COLLIERIES.
Situate in the parishes of CADOXTON-JUSTA-NEATH and LLANSAMLET, in the county of GLAMORGAN, containing in the whole about FOUR THOUSAND ACRES, together with all the ENGINES, PLANT, and MACHINERY belonging thereto.

Full particulars of the leases, and terms under which the leasehold portions are held, can be obtained upon application to JAMES KEMPTHORNE, Esq., Solicitor, Neath; or to the Auctioneer, at his offices at Neath and Swansea.

NOTICE.—THE SALE of the MINES and MINERALS under part of the GLANBRANE ESTATE, advertised for sale at the Castle Hotel, Neath, for the 1st February next, is POSTPONED until further notice.
Neath, Jan. 18, 1867.

TO BE LET, in the SOUTH WALES COAL BASIN, the COAL and IRONSTONE UNDER the FARMS of CWM GARNANT, GORSE GARNANT, and BRYNCETHIN, in the parish of BETTWS, in the county of CARMARTHEN. The property is connected by rail with the shipping ports of Llanelly and Swansea. For further particulars, apply to Messrs. FIELD, ROSCOE, and Co., 36, Lincoln's Inn-fields; or to Mr. WILLIAM ROSSER, land agent, Llanelly.

TENDER.

THE DUN MOUNTAIN COPPER MINES.—TO BE SOUGHT BY TENDER, the DUN MOUNTAIN COPPER MINES, with the LIVES and DEAD STOCK thereon, situate at NELSON, in NEW ZEALAND.

The property consists of the following particulars:—
A FREEHOLD MINING ESTATE, called the DUN MOUNTAIN, situate at Nelson, in New Zealand, containing by admeasurement 1687 acres, little or less, with all the timber and timber-like trees growing thereon.

Another FREEHOLD ESTATE, contiguous to the said Dun Mountain, containing upwards of 2260 acres.

Also, TWO PIECES of FREEHOLD LAND in Brook-street and Alton-street, containing 19 acres or thereabouts, with houses, stables, offices, and building standing thereon.

Also, a FREEHOLD TRACT, 1 chain wide, through the estates of J. Newby, T. R. Hackett, and others.

The RAILWAY RAILS on the said Dun Mountain to the town of Nelson, fixed, with the sleepers thereon belonging, as the same now stand.

There are about 14 miles of railway.

Together with the HOUSES, WAGONS, and ROLLING STOCK, &c., appertaining to such mining property.

For further particulars, apply to Messrs. OLIVERSON, PEACHEY, DENBY, PEACHEY, solicitors, 8, Frederick's-place, Old Jewry, London, to whom tenders may be sent.

VALUABLE COAL FIELD IN THE WEST OF FIFE TO LET.

TO BE EXPOSED TO LET, BY PUBLIC ROUP, within the Town-house of Dunfermline, on Tuesday, the 12th day of February, at Twelve o'clock noon, on a lease for 21 years, from and after Whitsunday, or such longer period as may be agreed upon, the WHOLE SEAMS of COAL, SHALE, IRONSTONE, and FIRECLAY, in and under a portion of the

belonging to the Burgh of Dunfermline, extending to 150 imperial acres, and lying about two miles north-east of the burgh.

Most of the coal seams, which have rendered the collieries of Wellwood, 7 hill, and Haibeth so famous, are known to be in these lands. There is facility for conveying the minerals now to be let, by railway or otherwise, all directions.

Further information may be had, and the conditions of let seen, on application to DAVID LINDALE, Esq., Mining Engineer, Edinburgh; or to JOHN DALE, Esq., Town Clerk of Dunfermline.—Dunfermline, Jan. 15, 1867.

GELYNOG LLANTWY COLLIERY.—FOR SALE, PRIVATE CONTRACT.

The Liquidators of the GELYNOG LLANTWY COLLIERY COMPANY (LIMITED) wish to DISPOSE of the valuable PLANT and MACHINERY, together with the unexpired term of the LEASE of this Colliery. The Plant and machinery is in good order: it has been laid down during the past two years, comprising everything necessary for working the colliery.

Further particulars, and orders to view, may be obtained on application to ALFRED BARKER, Esq., 1, Westminster Chambers, Victoria-street, London, of the Official Liquidators.

DEAN FOREST, GLOUCESTERSHIRE.

VALUABLE COAL FIELD.—TO BE SOLD, OR TO BE LET, in the Dean Forest Colliery, in a rich COAL FIELD, of which the Dean Forest Colliery is one of the best, and which has been worked for many years, but are now nearly exhausted. Fire-damp is not in the Dean Forest Colliery, and the principal vein lies generally under top. The property is linked by direct communication with the Port of Cardiff. For further particulars, apply to Messrs. DEBENHAM, TEWSON, FARMER, Land Agents, 80, Cheapside, London.

FOR SALE, and may be seen at the Ashburton Mines, 56 in. PUMPING ENGINE, with 11 ton CORNISH made BOILER, ONE 40 in. PUMPING ENGINE, only made a short time, and as good as new, with an 11 ton BOILER. A 24 in. WHIM ENGINE, with stamps attached, 11 ton BOILER. Several WATER-WHEELS of various sizes, one with excellent drawing machine attached. Pumps and materials of all sizes. Application may be made to Mr. W. MATHEWS, engineer, Tavistock, can be seen on application to people in charge of the mine.

LEAD MINE.—FOR SALE, BY PRIVATE CONTRACT, LEASE, PLANT, and MACHINERY of the TEES SIDE MINE, ALSTON, CUMBERLAND. The sett is very extensive, and is traversed by several powerful veins; from one of them one of the best lead has been worked for many years, and on a length of ground about 50 fathoms extent, at 1-7th dues. The dues are now 1-20th. Lodgings for miners, shops, stabling, &c., are all in order for immediate operations.

The agent on the mine will show the property, and for other particulars to Mr. J. H. ROBINSON, 21, Cumberland-row, Newcastle-on-Tyne; or to HOYLE, SHIPLEY, and HOYLE, Solicitors, Newcastle-on-Tyne; or Messrs. HOYLE and HOYLE, Solicitors, 123, Cannon-street, London.

IMPORTANT IRONWORKS IN MONMOUTHSHIRE FOR SALE.

THE CWMCELYN, BLAINA, AND COALBROOK IRONWORKS, BRAND C C, TO BE SOLD, BY AUCTION, at the Auction Mart, London, at the end of February, 1867, at One o'clock, previously sold by private contract.

These Works comprise ONE THOUSAND ACRES of MINERAL PROPERTY, of which 400 are freehold, BLAST FURNACES, FORGES, and MILLS; DRIES, ENGINEERING SHOPS, and TIMBER SAW MILLS; all on a complete system of railways; together with LOCOMOTIVE ENGINES, extensive ROLLING STOCK, and every other requisite for carrying on the manufacture of iron. The forges and mills have averaged for six years a 30,000 tons of finished iron.

There is a population of 7000 to 8000 attached to the works, with ample accommodation, including about 1600 houses belonging to the property.

The minerals are well opened and drained, and in quality and quantity to any in the district; the coal for steam purposes is unsurpassed.

The brand, or make, of the iron is well known in Great Britain, on the Continent, the United States, and the Colonies.

The works are distant twenty miles from Newport, and are intersected by Monmouthshire Railway, affording a direct transit to the shipping ports, also to the inland markets.

The property is well worthy the attention of capitalists, who are interested in the purchase by private contract.

The property may be viewed, and the particulars with every information, by application to Mr. F. LEVICK, Blaina Ironworks, near Newport, Monmouthshire; Messrs. GUILTER, BAILL, and Co., 3, Moorgate-street, London; and SECRETAN, WOODHOUSE, and COLBORNE, Newport, Monmouthshire.

CHARCOAL IRONWORKS FOR SALE.

The Works consist of one Dandy fire, three refineries, two puddling furnaces, hollow fires, hammers, and mill power, complete in every respect, excellent repair (much of it being nearly new), and now in full work, 40 tons per week of best charcoal bars. In addition to which there are appliances for making 25 to 30 tons per week of best coke bars. There is sheet mill, new, and capable of turning out 20 tons of charcoal or coke per week.

The works are situate in a district abounding in wood for charcoal, direct railway communication with the chief manufacturing towns of South Wales.

The blowing-engine and all the machinery are worked by water power, which there is an ample supply; but there is also steam-engine power, and in dry seasons, used as an auxiliary power when needed.

There are a manager's house and 21 workmen's cottages attached together with upwards of 20 acres of fine meadow land.

The whole is held under a lease for 21 years, of which 16 are unexpired.

To the capitalist, desirous to purchase and enter upon a lucrative without any delay, these works offer advantages seldom combined.

Reference (by his kind permission) to JOHN LAWRENCE, Esq., Carmarthen, Newport, Monmouthshire.

SUITABLE FOR A HARDWARE MANUFACTORY.

TO BE LET, for a term of 99 years, a most VALUABLE and ELIGIBLE SITE of from FIVE to FIFTEEN ACRES, with a falling stream of water passing through. Large collieries are in the neighbourhood, tin and wire works within a mile, and extensive iron carried on in the same valley. There is a first-class station within 20 minutes at which 20 passenger trains stop daily; the property is on a level with a siding may be constructed with great facility.

The Great Western and the London and North-Western trains work of the district and the traffic of the station referred to, and the shipment of these great railway companies has tended to reduce the rates to the lowest possible charges.

For further particulars, apply to Messrs. DEBENHAM, TEWSON, and Co., Auction, Land, and Estate Agency Offices, 80, Cheapside, London, E.C.

TO CAPITALISTS, PUBLIC COMPANIES, AND OTHERS.

Particulars of a VALUABLE and EXTENSIVE SLATE AND PROPERTY FOR IMMEDIATE DISPOSAL BY PRIVATE CONTRACT, situate in NORTH WALES, within about four miles of shipping ports, place a railway, running for nearly two miles parallel to and within 100 yards of the coast, will enable the producer to be conveyed at nominal cost. There are upon the property four or five very large SLATE VEINS and a VALUABLE COPPER MINE.

IMPORTANT REDUCTION IN THE PRICES OF PORTABLE ENGINES FOR 1866.

CLAYTON, SHUTTLEWORTH, AND CO
ENGINEERS,

MANUFACTURERS OF PORTABLE AND FIXED STEAM ENGINES, MACHINERY FOR PUMPING, HOISTING, GRINDING, SAWING, &c.
ENGINES FOR STEAM CULTIVATION, SELF MOVING ENGINES FOR COMMON ROADS, AND AGRICULTURAL PURPOSES GENERALLY.
STAMP END WORKS, LINCOLN, and 78, LOMBARD STREET, LONDON.

ALSO AT
LOWENGASSE No. 44, LANDSTRASSE, VIENNA, and GEGENUBER DEM BAHNHOF, PESTH.

Descriptive, illustrated, and priced catalogues free per post.
Special Drawings when required.
THE BEST STEAM THRASHING MACHINERY MADE.

SANDYS, VIVIAN, AND CO.
COPPER HOUSE FOUNDRY, HAYLE, CORNWALL,
ENGINEERS, IRON AND BRASS FOUNDERS.

MANUFACTURERS OF PUMPING ENGINES FOR WATER-WORKS, MINING MACHINERY, MATERIALS, AND TOOLS of every description.
Foreign mines supplied on the best terms, and at the shortest notice. Second-hand Mining Machinery and Pitwork in Stock; also a new 4 and a 2-horse power high-pressure vertical engines, with boilers, and a second-hand 10-horse steam engine, condensing.

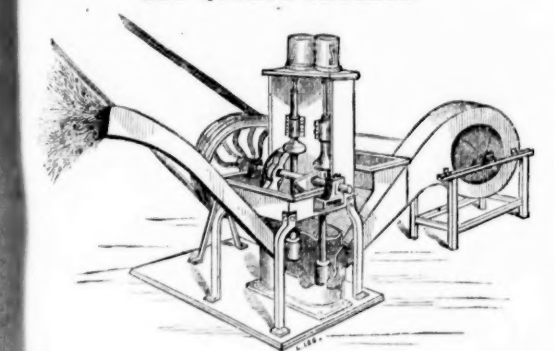
WILLIAMS'S PERRAN FOUNDRY COMPANY,
PERRANARWORTH, CORNWALL.

MANUFACTURERS OF STEAM PUMPING AND EVERY OTHER KIND OF ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.
London Agent.—Mr. EDWARD COOKE, 76, Old Broad-street, London, E.C.

BICKFORD'S PATENT SAFETY-FUSE OBTAINED THE PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNATIONAL EXHIBITION of 1862, in London, and at the IMPERIAL EXHIBITION held in Paris, in 1865.

BICKFORD, SMITH, AND CO.,
of TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—
EVERY COIL OF FUSE MANUFACTURED BY THEM IS TWO SEPARATE THREADS PASSING THROUGH THE COIL, OF POWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

CHILDS' PATENT ATMOSPHERIC ORE STAMP AND QUARTZ CRUSHER.



THIS is an IMPROVED STAMP, and will give as many blows per minute as an ordinary 10-stamp mill, and of far greater force, giving an effective blow of from 150 to 200 tons per minute, and will crush any known ore to an impalpable powder, saving every particle of the product for future operations.—a result not before obtained by any stamping process. Greater economy is combined than by any other known method. The patentee has erected a machine near his office, where he invites (by appointment) experienced and practical miners, engineers, chemists, metallurgists, and all others interested, to inspect its results. Every facility will be given for experiments upon different ores, and all other substances to be crushed.
For particulars, address—A. B. CHILDS,
No. 48, NEW OXFORD STREET, LONDON, W.C.

THOMAS TURTON AND SONS,
MANUFACTURERS OF

CAST STEEL FOR PUNCHES, TAPS, and DIES,
TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS of EVERY DESCRIPTION.

DOUBLE SHEAR STEEL, FILES MARKED T. TURTON.
BLISTER STEEL, EDGE TOOLS MARKED WM. GREAVES & SON.
GERMAN STEEL,
Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

SHEAF WORKS and SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.

Where the largest stock of steel, files, tools, &c., may be selected from.

Gun-Cotton—By Royal Letters Patent.

PRENTICE'S BLASTING GUN-COTTON PRODUCES NO SMOKE, and having been further REDUCED IN PRICE is now by far the CHEAPEST as well as the SAFEST material which can be used in any description of mining or quarrying work.
Sample cases, together with every information, may be obtained from—
THOMAS PRENTICE AND CO.,
173, FENCHURCH STREET, LONDON, E.C.
AGENT—Mr. Thorpe.

GUN-COTTON has been constantly used with great success in the tunnel of the Aberdeen Water-Works, lately opened by Most Gracious Majesty the Queen.

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.—THE EXPLOSIVE FORCE OF THIS BLASTING OIL IS TEN TIMES THAT OF GUNPOWDER, and the ECONOMY and SAVING IN TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close dens is immense.

It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton.
Being heavier than water it sinks to the bottom of a wet hole, no other tampering than water being required.
One charge of this blasting oil, which is now being used with wonderful effect in all the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous blasts from any other blasting material would do.

This invaluable quarrying agent may now be obtained from Messrs. J. W. Evans and Co., Carnarvon, sole consignees from the patentee.

COAL CUTTING MACHINERY.—THE WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are now READY TO MAKE CONTRACTS for the CONSTRUCTION and USE of such MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONNISTHORPE, and BOWER, 8, Britannia-street, Leeds.

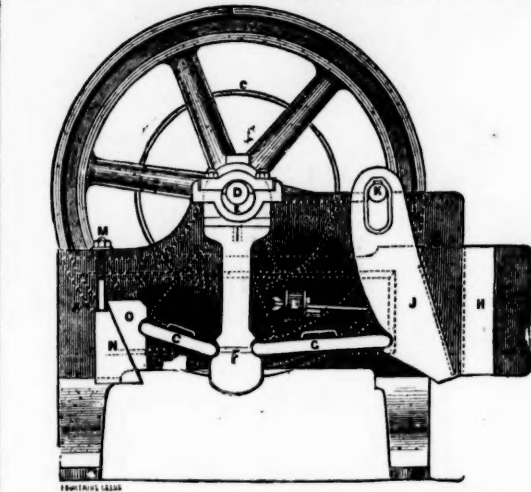
NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers forwarded post-free on application.

IMMENSE SAVING OF LABOUR. TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MCADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER, OR ORE CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.
It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.
For the Parys Mining Company,
JAMES WILLIAMS.

H. R. Marsden, Esq.
Eaton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw, about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.
H. R. Marsden, Esq.
THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent.
WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz.
WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust.
Messrs. ORD and MADDISON,
Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.
JOHN LANCASTER.

Oreco, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour.
WM. G. ROBERTS.

General Fremont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate.
SILAS WILLIAMS.

For circulars and testimonials, apply to—

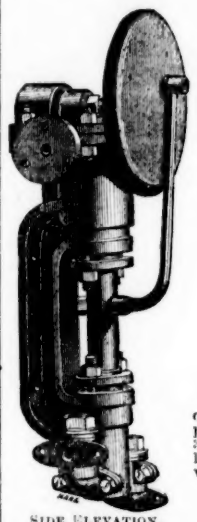
H. R. MARSDEN, SOHO FOUNDRY,

MEADOW LANE, LEEDS,

ONLY MAKER IN THE UNITED KINGDOM.

GIFFARD'S PATENT INJECTOR COMPLETELY SUPERSEDED BY THE NEW PATENT DONKEY STEAM PUMP

[SPECIFICATION.]



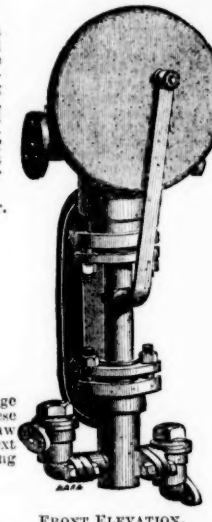
This Pump is constructed on an entirely novel and simple principle, there being only a crank-shaft and fly-wheel of small size, the slide-valve being worked inside the steam chest by means of a steel crank and friction roller, thus dispensing with eccentric rod and straps. All the working parts are made of steel, hardened and polished. The cylinder and pump are in one casting, and bored throughout the body of the pump as well as the stuffing-box. The pump-ram is of the best gun-metal, being cast in one piece with the piston and piston-rod, and fitted accurately to the bored body of the pump, thus ensuring a nearly perfect vacuum in pumping. The stuffing-box glands are also of gun-metal polished. The valves and boxes are of the best gun-metal, the valves being of the spherical description, the covers fitted with brass cages, and the joints faced metal to metal. The slide-valve is of hard bell-metal. The steam chest, with cylinder end, is in one piece, and may be removed without disturbing either steam or exhaust pipes. The whole engine may be taken to pieces and put together under steam in fifteen minutes, without disturbing any pipes whatever.

Size.	Ram ² in.	Stroke in.	Approx. h.p. boiler supplied.	Approx. gal. thrown p. hour.	Price.	Price of Giffard's Injector.
No. 4	1 1/2	3	15	230	£10 10	£15
5	1 3/4	3	22	350	12 12	19
6	1 7/8	4	30	500	14 14	23
7	2	4	40	700	17 0	27
8	2 1/4	4 1/2	55	900	19 10	29
9	2 1/2	5	75	1150	22 10	36
10	2 3/4	5 1/2	90	1420	25 10	40
11	2 7/8	6 1/2	110	1720	28 10	45
12	3	8	120	2000	31 10	50

N.B.—Sizes and capacities similar to Giffard's Injector. All guaranteed to work efficiently.

Terms: Nett Cash on Delivery in London.
Giffard's Injector will not force water over 120° Fahr., while these pumps possess the great advantage of being able to pump boiling water. Giffard's Injector will not draw water over 6 ft. deep, while these pumps draw water 15 ft., and by using one size larger than required for forcing the quantity will draw 30 ft. deep. These pumps begin to work at 15 lbs. per square inch; to work at a lower pressure the next larger size must be used. Sizes up to No. 10 kept in stock. Larger sizes, and special pumps for throwing water into tanks, or as fire-engines, can be made in a few days on application to the undersigned.

BROWN, WILSON, AND CO.,
80, CANNON STREET, E.C.; AND VAUXHALL IRONWORKS, S.



BRITISH, COLONIAL, AND FOREIGN PATENTS, REGISTRATION OF DESIGNS, COPYRIGHTS, TECHNICAL TRANSLATIONS, DRAWINGS, &c.

MR. MICHAEL HENRY,
Memb. Soc. Arts, Assoc. Soc. Engineers, Author of the "Inventors' Almanac," and the "Defence of the Patent Law."

PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.

Inventors advised in relation to Patents and Inventive and Industrial Matters. Printed information sent free by post. Specifications drawn and revised. Searches conducted. Abstracts, Cases, and Opinions drawn.

Translations of Catalogues, Trade Notices, and Circulars for the approaching Paris Exhibition. Mr. HENRY has had special experience in technical French, and in French Manufacturing and Commercial Matters.

Offices, 68, Fleet-street, E.C., London, corner of and entrance in Whitefriars-street.

CREASE'S NEW AND IMPROVED PATENT BORING MACHINE.—In consequence of the various and IMPORTANT IMPROVEMENTS that an experience of several years has enabled the inventor to introduce into these machines, he can with the most perfect confidence recommend them for their increased DURABILITY, SIMPLICITY, ECONOMY, and SPEED to be attained by their adoption in DRIVING LEVELS or DRIFTS.

The inventor has made arrangements to supply them in any quantity, with warranty. Orders executed according to their date of priority.

Address, EDWARD S. CREASE, Tavistock, Devon.

BASTIER'S CHAIN PUMP.—This patent pump is the MOST EFFICIENT in existence for LIFTING ANY QUANTITY OF WATER from ANY DEPTH. One lifting from a depth of 170 ft. may be seen at work daily, on application to the

SOLE LICENSEES,
MESSRS. J. JACKSON AND CO., ENGINEERS, 17, GRACECHURCH STREET, LONDON, E.C.

Who SUPPLY PUMPS and LICENCES.

Communications to Mr. Bastier, the patentee, to be sent to the same address.

AGENT FOR THE COUNTIES OF NORTHUMBERLAND AND DURHAM, YORKSHIRE, DERBYSHIRE, AND NORTH STAFFORDSHIRE.

MR. THOMAS GREENER, MINING OFFICE, NORTHGATE, DARLINGTON.

AGENTS FOR SCOTLAND,
MESSRS. P. and W. MACLELLAN, 127 and 129, IRONGATE, GLASGOW.

RAILWAYS AND MINES.—Capitalists who seek safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the *bona fide* merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the Money Market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range of profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £10 to £15 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to Railways and Mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment.

MESSRS. TREMICK AND CO.,
ST. MICHAEL'S HOUSE, CORNHILL, LONDON.

FINANCE, RAILWAYS, AND MINING IN THE UNITED STATES.—Persons in the United Kingdom and the colonies interested in the above should order THE STOCKHOLDER'S MONITOR OF FINANCE AND INDUSTRY, MINING AND RAILWAY RECORD. Published every Tuesday morning, at No. 72, William-street, New York, U.S.A., 16 pages 4to, at 36 per annum for European subscriptions, postage prepaid; six months, \$3. Accurate quotations of all important Bonds and Stock Securities in the United States; Government, State, City, Bank, Insurance, Petroleum, Mining, and other miscellaneous Joint-Stock Organisations, with the Financial Statements of the same; Notices of Payment of Interest and Dividends; with numerous papers on United States Finance, and the Railway and mining interests of that country. Investors and parties dealing in railway materials and supplies, or mining machinery, will find this journal an excellent medium for advertising in the United States their manufactures and inventions. Subscriptions and advertisements received at the office of the LONDON MINING JOURNAL, 26, Fleet-street, E.C., and by Mr. F. ALGAR, agent, 11, Clement's-lane, Lombard-street, London, E.C.

THE WREXHAM ADVERTISER, DENBIGHSHIRE, FLINTSHIRE, SHROPSHIRE, CHESHIRE, AND NORTH WALES REGISTER (Established 1848).—The town of Wrexham forms the centre of a large and important agricultural and mining district, which, from the increasing attention of capitalists, aided by the advantages afforded by new railways, is rapidly increasing in population, and bids fair to rival Wolverhampton in commercial importance. The Advertiser, partaking of the general prosperity, has largely increased its weekly circulation, 1000 more copies being now issued of each impression than at the close of 1864, and it now has a circulation more than double that of any other paper published in Denbighshire and Flintshire, and is the only medium by which advertisers can fully and effectually communicate with the public generally in those counties. Price 3d., stamped 3d. Published by Bayley and Bradley, Advertiser office, Wrexham.

THE FLINT COUNTY CHRONICLE: A Mining, Agricultural, and General Advertiser for Mold, Flint, Rhyl, Holywell, Northop, Buckley, Hawarden, Saltney, and neighbourhood. The great success which has attended the publication of the "County Chronicle" justifies the proprietors in drawing the attention of advertisers to the special advantages it offers as an advertising medium. For the announcements of auctioneers, public companies, and tradesmen, it is the best in the county, having attained a circulation throughout Flintshire twice that of all the other so-called local papers combined. As a newspaper it contains full and impartial reports of all local events, and devotes particular attention to the mining and oil trade interests of the district—special articles appearing from week to week. All communications should be addressed "To the Editor," Bromfield Villa, Maesdyderwen, Mold.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764.) Published every Saturday, price 2d., or quarterly 2s. 2d.

THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER. Published every morning, price 1d.

Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

CHARLES RYLAND AND SONS' WEEKLY REPORT ON THE IRON TRADE.—The "WEEKLY REPORT ON THE IRON TRADE" is a reliable authority on all matters connected with the various trades of the Iron and Mining Districts of North and South Staffordshire, Cleveland District, North and South Wales, and Scotland. The list of subscribers comprises the names of the leading firms in the great centres of industry above referred to, and contains complete and accurate information, and enables the reader to follow the various branches of the metallic trades in all parts of the country.

Arrangements have been made for illustrating advertisements with block engravings, &c. Subscriptions, payable in advance.—One year, post free, £2 2s.; half-year, post free, £1 1s.; quarter-year, post free, 10s. 6d. Remittances may be made in postage stamps. Advertisements and orders to be addressed—Charles Ryland and Sons, The Mount, Handsworth, Birmingham.

THE STOCKTON AND HARTLEPOOL MERCURY AND MIDDLESBOROUGH NEWS (published at Hartlepool) is eminently the organ of the Coal, Iron, and Iron Shipbuilding Trades in the extensive Mining and Maritime Districts of North Durham and Cleveland, with which it has been closely identified since its origin. The "Mercury" was for years the only newspaper published in North Durham and Cleveland, and is yet the only one published more than once a week. Advertisements to be forwarded to the publisher, Mr. JOHN H. BELL, Southgate, Hartlepool.

NERVOUS DEBILITY: ITS CAUSE AND CURE.—Before seeking aid from the so-called remedies without medicine, read this valuable work on the Treatment and Cure of Nervous and Physical Debility, Loss of Appetite, Pains in the Back, Spasmodic, &c., with Plain Directions for Perfect Restoration to Health. Sent post free to any address, on receipt of two postage stamps. Letters of enquiry or details of case promptly answered.

Address, Dr. SMITH, 8, Burton-crescent, London, W.C.

DR. WATSON (of the Lock Hospital), F.R.A.S., Member of the College of Physicians and Surgeons, on the SELF-CURE OF NERVOUS and PHYSICAL DEBILITY, Loss of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with means for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London. Consultations daily from 11 till 3, and 6 till 8; Sundays, 10 till 1.

Just published, post free for two stamps.

WONDERFUL MEDICAL DISCOVERY, demonstrating the true causes of Nervous, Mental, and Physical Debility, Loss of Spirits, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Pershare.	Last paid.
1200	Alderley Edge, c. Cheshire*	10 0 0.	—	—	8 7 8.	0 10 0.	Aug. 1866
2000	Botalack, c. St. Just	91 5 0.	—	—	488 15 0.	5 0 0.	May, 1866
10000	British Slate Company	9 0 0.	—	—	9 per cent.	—	Sept. 1866
4000	Brookwood, c. Devon	1 11 0.	—	—	0 5 0 0.	0 2 6.	Sept. 1866
1000	Brookwood, c. Devon	12 0 0.	—	—	8 7 0.	0 6 0.	Aug. 1866
6400	Cashwell, c. Cumberland*	2 10 0.	—	—	0 1 6 0.	0 1 6.	Aug. 1866
916	Cargill, s. Newlyn	15 5 7.	—	—	13 15 0.	1 0 0.	Feb. 1866
867	Cwm Erfin, c. Cardiganshire*	7 10 0.	—	—	21 18 0.	1 0 0.	Jan. 1867
128	Cwmystwili, c. Cardiganshire	3 0 0.	—	—	372 10 0.	3 0 0.	Dec. 1866
280	Darwent Mines, s. Durham	300 0 0.	—	—	167 0 0.	5 0 0.	Oct. 1866
1024	Devon Gr. Consols, c. Tavistock*	1 0 0.	420	415 425	1048 0 0.	6 0 0.	Jan. 1867
358	Dolcoath, c. Camborne	128 17 6.	—	—	818 10 0.	2 0 0.	Dec. 1866
6144	East Caradon, c. St. Cleer†	2 14 6.	—	—	14 7 6 0.	2 0 0.	Jan. 1867
300	East Darwen, c. Cardiganshire	32 0 0.	—	—	136 10 0.	2 0 0.	Nov. 1866
128	East Pool, c. Pool, Illogan	24 5 0.	—	—	390 0 0.	2 10 0.	Jan. 1867
5000	East Rosewarne, c. G. W. Newlyn	2 15 0.	—	—	0 10 6 0.	1 6.	Jan. 1866
1908	East Wheel, c. W. Newlyn	3 9 0.	—	—	2 7 6 0.	7 6.	May, 1866
2800	Foxdale, c. Christow	3 18 6.	—	—	3 5 6 0.	5 0 0.	Feb. 1866
5000	Frank Mills, c. Christow	3 18 6.	—	—	5 15 0 0.	10 0.	Dec. 1866
15000	Great Laxey, c. Isle of Man*	4 0 0.	—	—	10 17 6 0.	7 6.	Dec. 1866
5908	Great Wheel, c. St. Helston†	40 0 0.	—	—	29 0 0 0.	1 10 0.	Oct. 1866
1024	Herodfoot, c. near Liskeard†	8 10 0.	—	—	0 10 0 0.	5 0 0.	April, 1866
6000	Hingston Down, c. Devon	5 10 6.	—	—	483 10 0.	3 0 0.	Nov. 1866
400	Lisburne, c. Cardiganshire, Wales	18 15 0.	—	—	3 11 0 0.	2 0 0.	Jan. 1867
9000	Marke Valley, c. Cardigan	4 10 6.	—	—	0 13 0 0.	3 0 0.	Mar. 1866
3000	Minera Boundary, c. Wrexham*	1 0 0.	—	—	205 8 0.	3 0 0.	Nov. 1866
1800	Minera Mining Co. l. Wrexham*	25 0 0.	—	—	0 7 9 0.	7 9.	July, 1866
20000	Mining Co. of Ireland, c. l. d.	7 0 0.	—	—	0 6 6 0.	2 6.	Mar. 1866
40000	Mynydd Iron Ore†	3 10 0.	—	—	5 per cent.	—	Nov. 1866
—	New Merrybent and Middleton*	3 10 0.	—	—	10 per cent.	—	May, 1866
600	Pant-y-Glen, s. l.	20 0 0.	—	—	137 10 0.	5 0 0.	Jan. 1866
200	Parys Mines, c. Anglesey*	50 0 0.	—	—	81 17 6 0.	0 10 0.	Nov. 1866
1120	South Caradon, c. St. Cleer†	1 5 0.	330	300 330	559 10 0.	5 0 0.	Nov. 1866
6000	South Darwen, c. l.	3 0 0.	—	—	0 3 6 0.	2 6.	June, 1866
6000	Tincroft, c. l. Pool, Illogan†	9 0 0.	—	—	18 0 0 0.	0 0 0.	Oct. 1866
3000	W. Chiverton, c. Perranzabuloe†	10 0 0.	—	—	15 7 6 0.	2 0 0.	Nov. 1866
400	West Wheel Seton, c. Camborne†	47 10 0.	—	—	464 14 0.	2 10 0.	Dec. 1866
512	Wheel Basset, c. Illogan†	5 2 6.	—	—	622 0 0.	1 0 0.	Oct. 1866
1024	Wheel Friendship, c. Devon	20 0 0.	—	—	300 10 0.	0 10 0.	Nov. 1866
4295	Wheel Killy, c. St. Agnes	5 4 6.	—	—	2 19 0 0.	1 6.	May, 1866
1024	Wheel Mary Ann, l. Menheniot†	8 0 0.	—	—	60 7 6 0.	0 10 0.	Dec. 1866
2000	Wheel Rose, c. St. Agnes	58 10 0.	—	—	1 0 0 0.	0 10 0.	Feb. 1866
396	Wheel Seton, c. Camborne	58 10 0.	—	—	23 15 0.	4 0 0.	Dec. 1866
1040	Wheel Trelawny, s. l. Liskeard†	5 17 0.	—	—	54 5 6 0.	8 0 0.	Dec. 1866
17000	Wicklow, c. l. Wicklow	2 10 0.	—	—	45 15 0 0.	0 18 0.	Oct. 1866

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

1200	Bryn Gwyn, <i>l.</i> Mold	9 0 0.	—	..	..	3 3 6.	0 13 6.	Aug. 1865
2080	Clifford Amalgamated, <i>c.</i> Gwen	32 0 0.	9½	8 8½	..	35 6 0.	0 10 0.	June, 1865
1055	Cradock Moor, <i>c.</i> St. Cleer	11 12 0.	—	..	..	7 12 0.	0 4 0.	June, 1865
6000	East Carn Brea, <i>c.</i> Redruth	3 15 0.	3½	3½	3½	0 5 0.	0 5 0.	June, 1865
6000	New Birch Tor and Vitrifer Cons. <i>l.</i>	1 6 6.	—	..	..	0 13 0.	0 2 0.	Oct. 1865
6000	West Basset, <i>c.</i> Illogan	1 10 0.	1	—	..	26 14 0.	0 5 0.	July, 1865
1024	Wheal Exmouth, <i>l.</i> Christow	—	—	..	..	—	0 2 6.	Oct. 1865

FOREIGN DIVIDEND MINES.

15000	Cape Copper Mining*	7 0 0.	—	—	2 12 6.	0 10 0.	April, 1866
21000	East Indian Coal, Calcutta	2 0 0.	—	—	1 5 4 0.	0 2 0.	Oct. 1866
20000	Fortuna, l. Spain†	20 0 0.	—	—	22 0 0 0.	0 10 0.	June, 1866
10000	Gen. Mining Assoc., Nova Scotia†	20 0 0.	—	—	7 1/2 per cent.	—	per annum.
10000	Gonnesa, l. (5000 £5 pd., 5000 £4 pd.)	3 0 0.	—	—	11 6 4 0.	0 5 0.	Jan. 1865
15000	Linares, l. Spain†	3 0 0.	—	—	10 per cent.	—	Yearly.
50000	Panuco, c. l.	3 0 0.	—	—	4 3 2 1.	3 6.	Dec. 1866
10000	Ponteland, c. l. France†	20 0 0.	—	—	0 15 6 0.	1 0 0.	July, 1866
100000	Port Phillip, c. l. Clunes†	1 0 0.	—	—	0 15 per cent.	—	Dec. 1866
120000	Scottish Australian Mining Co. l.	15 0 0.	—	—	72 15 0.	4 0 0.	Dec. 1866
11000	St. John del Rey, Brazil†	15 0 0.	—	—	0 9 0 0.	0 10 0.	Jan. 1866
50000	Victoria (London) £25000 £1 pd., £25000 £2 pd.	1 0 0.	—	—	0 19 6 0.	2 6.	May, 1865
10000	West Canada Mining Company*	1 0 0.	—	—	—	—	—

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quenangen United, c.	4 10 0.	—	—	4 5 0.	6 15 0.	Nov. 1865
20000	Australasian, c. South Australia†	7 7 6.	—	—	0 2 0 0.	0 10 0.	June, 1865
2464	Burra Burra, c. South Australia	5 0 0.	—	—	325 0 0.	5 0 0.	Dec. 1864
12000	Cobre Copper Company, c. Cuba†	40 10 0.	—	—	101 0 0.	1 0 0.	Jan. 1865
10000	Copiapu Mining Company, Chile†	16 10 0.	—	—	6 18 0.	0 10 0.	Nov. 1862
100000	Don Pedro No. del Rey, Brazil†	0 14 0.	—	—	0 9 0.	0 9 0.	Dec. 1863
70000	English and Australian, c. l.	2 10 0.	—	—	1 12 0.	2 0 0.	Aug. 1864
68000	Kapunda Mining Co., Australia†	1 0 0.	—	—	0 12 0.	0 10 0.	June, 1864
7927	Lusitania (Portugal)†	3 0 0.	—	—	1 7 0.	0 3 0.	June, 1864
43174	United Mexican, s. Mexico	25 0 0.	—	—	2 19 0.	4 0 0.	Sept. 1864
10000	Vancouver, c. l.	3 0 0.	—	—	0 15 0.	0 5 0.	Nov. 1864
45000	Yudanamutana, c. S. A.†	3 0 0.	—	—	0 5 0 0.	0 5 0.	Aug. 1863

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos, l. Spain†	2 0 0.	1 1/4.	1 1/4.	Fully pd.
100000	Anglo-Brazilian, g††	0 10 0.	1/2.	3 1/2	Nov. 1866
40000	Britannia Silver-Lead Mines, France* [15750 lrs. pd.]	1 12 0.	—	—	Aug. 1866
20000	Capula, s. Mexico†	3 0 0.	—	—	Oct. 1866
30000	Chontales, c. l. Nicaragua†	10 0 0.	2 1/2.	2 1/2.	April, 1866
10000	Copapo Smelting, Chili†	10 0 0.	—	—	Nov. 1866
300	Copper Mines' Co. of South Australia* [150 £100 pd.]	150 £70 pd.]	—	—	June, 1866
25000	East del Rey, c. Brazil†	2 15 0.	—	—	Jan. 1866
15000	El Chio Silver Mining and Reduction Company*	4 10 0.	—	—	Fully pd.
8000	English and Canadian Mining Company*	5 0 0.	—	—	Dec. 1866
50000	Frontino and Bolivia, g. New Granada†	1 12 6.	3s.	—	Sept. 1862
80000	Great Northern, c. South Australia†	1 11 6.	—	—	Fully pd.
10000	Great Barrier Land, Mining, c. New Zealand*	5 0 0.	—	—	Jan. 1867
85960	Marfiora and New Granada†	0 12 6.	—	—	Aug. 1862
12500	Nerbuda Coal and Iron† [5000 £5 pd., 5000 £4 pd.]	—	—	—	Sept. 1865
50000	Nova Scotia Land and Gold†	1 15 0.	—	—	April, 1866
15000	Otea, c. New Zealand† [5000 fully paid]	1 10 0.	—	—	Stock.
6000	Peel River Land and Mineral†	100 0 0.	—	—	Aug. 1866
30000	Pestarena, g††	2 0 0.	2 1/4.	1 3/4 2	Fully pd.
17000	Quebrada, c. Venezuela†	10 0 0.	—	—	May, 1866
10178	Rhenish Consolidated, l. [5000 £5 pd., 4178 £2 10s. pd.]	—	—	—	April, 1864
50000	Rossa Grande, c. Brazil†	0 7 6.	—	—	Sept. 1866
15000	San Pedro del Monte, s. Mexico*	4 0 0.	—	—	Fully pd.
10000	San Roque, l. Spain	5 0 0.	—	—	July, 1866
1000	Schlossberg Colliery*	10 0 0.	—	—	Jan. 1867
20000	Val Antigua, g†	0 17 6.	—	—	Fully pd.
6000	Val Salsam, s. l.†	6 10 0.	—	—	Aug. 1866
5000	Valdemar Mining Company*	20 0 0.	—	—	Fully pd.
50000	Vallanzasca, g. Italy†	0 15 0.	—	—	Aug. 1866
45000	Victor Emanuel, c. Italy*	1 0 0.	—	—	Fully pd.
20000	Washoe, c. l.	5 0 0.	—	—	Fully pd.
80000	Worthing, c. South Australia†	1 0 0.	1/4.	1/4 1/2	Fully pd.
75000	Yorke Peninsula, South Australia	1 0 0.	—	—	Fully pd.

BANKS AND FINANCIAL COMPANIES.

Shares.	Banks.	Paid.	Last Pr.	Bus. done.
40000	Alliance*	25 0 0.	—	17 17 1/2
40000	Australian Mort. Land and Finance†	5 0 0.	—	5 5 1/2
30000	Australasia†	40 0 0.	—	64 66
10000	Bank of Egypt†	25 0 0.	—	35 37
50000	Bank of New Zealand†	10 0 0.	—	18 19
25000	Bank of Otago†	10 0 0.	—	5 7
20000	Bank of Victoria, Australia†	25 0 0.	—	37 39
8915	Canada Company†	32 10 0.	—	70 75
50 000	Canadian Loan and Investment†	2 10 0.	—	1 1/2
40000	Chart. Bank India, Aust. & China†	20 0 0.	—	18 19
30000	Char. Merc. India, Lond. & China†	25 0 0.	—	32 34
50000	City†	10 0 0.	—	14 15
20000	Colonial†	25 0 0.	—	38 40
120000	Consolidated Bank†	4 0 0.	—	3 3 1/2
200000	Credit Foncier and Mobilier of England†	8 0 0.	—	4 1/2
20000	East London†	5 0 0.	—	2 1/2
20000	English, Scottish, & Aust. Chart.†	25 0 0.	—	18 19
20000	English and Swedish†	25 0 0.	—	12 13
250000	General Credit and Finance of London*	6 0 0.	—	4 1/2
150000	International Financial Society†	5 0 0.	—	24 26
300000	International Land Credit†	5 0 0.	—	2 1/2
4000	London African Trading†	6 0 0.	—	4 5
50000	London Char. Bank of Australia†	10 0 0.	—	22 1/2
37500	London and County†	20 0 0.	—	22 1/2
40000	London Financial Association†	25 0 0.	—	6 1/2
72000	London Joint-Stock†	15 0 0.	—	42 44
10000	London and South-Western†	20 0 0.	—	18 19
50000	London and Westminster†	20 0 0.	—	94 97
50000	Mercantile and Exchange†	12 10 0.	—	—
17156	Metropolitan and Provincial†	20 0 0.	—	10 1/2
20000	Mineral Rights Association*	1 0 0.	—	—
20000	National of Australia†	4 0 0.	—	6
20000	National of Liverpool†	15 0 0.	—	—
40000	National†	30 0 0.	—	70
20000	New South Wales†	20 0 0.	—	46 47
40000	Union of Australia†	25 0 0.	—	47 49
80000	Union of London†	15 0 0.	—	45 46

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.	
4000	Ballaclough, l. of Man, l. c.	1 10 0.	—	—	Oct. 1866	
3000	Bedford Unit, c. Tavistock*	2 6 8.	—	—	—	
3200	Bedol Aur, l. Holywell	1 7 0.	—	—	Nov. 1866	
500	Billins, l. Flint	30 0 0.	—	—	Nov. 1866	
1000	Bladenyffryn, s. l.	2 0 0.	—	—	Mar. 1866	
1248	Bowditch, l. c. St. Just	7 6 0.	—	—	Dec. 1866	
5000	Bottle Hill, l. Plympton	114 6.	—	—	June, 1866	
200	Brynfor Hall, l. Flint	28 0 0.	—	—	Jan. 1866	
5000	Bryn Gwlog, l. Flint	9 0 0.	—	20 22½	June, 1866	
30000	Calbeck Fells, l. Cumber*	1 10 0.	—	—	Dec. 1866	
1000	Camborne Consols. c.	18 10 0.	—	—	Feb. 1866	
4000	Camborne Vn. & Wh. Fran. l.	11 8 10.	1	—	July, 1866	
11000	Capa Cornwall, l. c. [8000 £2 10s. pd., 3000 10s. pd.]	—	—	—	Oct. 1866	
12000	Caradon & Phoenix [£200 20s. pd., 9500 12s. pd.]	—	—	—	April, 1866	
914	Caradon Cons. & Cleer s. l.	10 9 11	9 11	—	Nov. 1866	
1000	Carn Brea, c. s. Hlozan.	25 0 0.	21	—	Nov. 1866	
6000	Carn Camborne, c. Cambu.	2 1 0.	—	1½ 1½	Jan. 1866	
5000	Carnarvonshire, l.	4 0 0.	—	—	April, 1866	
4005	Cardigan Cons. [1000 £5 pd., 3005 £4 6s. pd.]	—	—	4s.	April, 1866	
600	Cardiganshire, l.	17 10 0.	—	—	Sept. 1866	
20000	Carysfort [3200 £2½ pd., 16800 £1½ pd.]	—	—	—	Mar. 1866	
60000	Castell Carn Dochan, g.	0 8 6.	—	—	—	
2500	Castell Glacen, l. Flint*	—	—	—	Aug. 1866	
2500	Castell Miners, l.	3 12 6.	—	—	Nov. 1866	
16000	Central Smallbeck l.	1 0 0.	—	—	Nov. 1866	
3000	Chiverton, l. Perranzababu.	9 2 6.	9	9 9½	Nov. 1866	
3000	Chiverton Moor, l. Perranz.	5 18 6.	5½.	6 6½	Nov. 1866	
16000	Coolatraz & Bond [5300 £1 pd., 10700 16s. pd.]	—	—	—	Feb. 1866	
256	Condorow, c. l. Camborne	76 10 0.	—	13 15	—	
5000	Connoerre, c. s. d. Wicklow*	1 0 0.	—	17s.	—	
2450	Cook's Kitchen, c. Hlozan.	19 10 0.	12	10 11	July, 1866	
4000	Copper Hill, c. Plymouth	12 10 0.	—	—	Aug. 1866	
6500	Cornish Clay and Tin*	1 0 0.	—	—	July, 1866	
6000	Cornwall Great Consols.	1 8 0.	—	—	May, 1866	
861	Crane, c. Camborne.	33 9 6.	—	—	Dec. 1866	
12000	Crelake, c. Tavistock	3 8 0.	—	—	July, 1866	
6000	Cuddra, c. St. Austell	5 0 0.	—	—	Oct. 1866	
35000	Dale, l. North Stafford.	1 0 0.	3s.	2s. 3s.	Nov. 1866	
1000	Darren, l. Cardigan*	12 4 0.	—	—	Oct. 1866	
2000	Devon Great Marla*	7 5 3.	—	—	May, 1866	
4000	Devon W. & R. s. l.	2 5 3.	—	—	Aug. 1866	
1024	Devon Wheal Losses, c.	17 0 0.	—	—	July, 1866	
12800	Drake Wells, & Calstock.	2 5 0.	1	1½ 1½	Dec. 1866	
656	Ding Dong, & Gulval.	49 14 6.	—	—	Dec. 1866	
20000	Dolfrwynog, g.	0 15 0.	—	—	June, 1866	
25000	Dundalk, Ireland, l.	0 12 6.	—	—	April, 1866	
3000	Dyrnwgwn, l. Wales	13 7 0.	8½.	8 9	June, 1866	
740	Eaglebrook, l.	19 15 0.	—	—	July, 1866	
512	East Bassett, c. Plymouth	25 0 0.	25	23 25	—	
1000	East Basset, c. Grylls	3 5 0.	—	—	July, 1866	
4096	East Brookwood, Holne.	2 8 8.	—	—	July, 1866	
2000	East Buller, c. Gwennap	2 0 0.	—	—	Mar. 1866	
4000	East Chiverton, l. Perranz.	2 9 3.	2½.	2 2½	Dec. 1866	
2048	E. Falmouth, s. l. Kenwyn.	5 0 6.	—	—	April, 1866	
6000	E. Grenville, c. Camborne.	3 3 6.	2½.	2 2½	Nov. 1866	
4000	E. Gunnislake & S. Bed. c.	20½	—	—	Nov. 1866	
6000	East Hlozan, c. l. Camborne	3 0 0.	—	—	Oct. 1866	
6145	East Jane, s. l. Cardinham	2 17 0.	—	—	April, 1866	
4000	East Laxey, l. Isle of Man*	2 10 0.	—	—	Dec. 1866	
1000	East Moor, s. l.	0 5 0.	—	—	Aug. 1866	
3986	E. Providence, c. l. Uney Lel.	4 19 9.	—	—	Nov. 1866	
5000	E. Tresavan, c. Gwennap	0 10 0.	—	—	May, 1866	
6000	East Snaefell, l. l. of Man*	2 0 0.	—	—	Dec. 1866	
5610	East Seton, c. Camborne	0 11 0.	1	¾ ¾	Nov. 1866	
900	E. St. Just, l. c. [£25 pd., 1000 110s. pd.]	—	—	—	Nov. 1866	
256	E. St. Tolgus, c. Redruth	32 0 0.	—	—	April, 1866	
1190	E. Wh. Agar, c. St. Cleer.	12 17 0.	—	—	Jan. 1866	
4000	E. W. Russel, Tavistock	11 16 0.	2½.	3 3½	Jan. 1866	
15000	Ellen Unit, c. z. St. Agnes*	1 0 0.	—	—	Nov. 1866	
6000	Fortune Consols, c.	0 12 6.	—	—	—	
940	Fowey Cons. c. Tywardreath	5 1 6.	—	—	June, 1866	
6000	Furze Hill Wood Con. Buckl.	1 16 0.	—	—	Feb. 1866	
10000	Furston, c. [5000 £1 10s. l.]	—	—	—	Mar. 1866	
1000	G. East, l. Cornwall.	5 12 9.	—	—	Mar. 1866	
4096	Garlandina Unit, c. Kenwyn	5 7 7.	—	—	Feb. 1866	
4000	Gawton, c. Tavistock	3 5 6.	—	2½ 3½	Feb. 1866	
6000	Gen. Min. Co. for Ireland, c.	4 0 0.	2½.	—	—	
40000	Glasgow Caradon c. [30000 £1 pd., 10000 10s. pd.]	—	—	—	Sept. 1866	
6144	Gonamena, c. St. Cleer	5 16 6.	—	—	Dec. 1866	
6000	Gothic, s. l. Cardigan*	2 10 0.	—	—	Nov. 1866	
486	Grambler and St. Aubyn*	70 0 0.	6½.	5 6	Nov. 1866	
4096	Great Caradon, c. St. Ives.	3 11 0.	—	¾ ¾	Nov. 1866	
200	Gr. East, Lovell, c. Redruth	2 0 0.	—	—	Nov. 1866	
6000	Great Mona, l. Isle of Man*	3 10 0.	—	—	June, 1866	
12500	Gr. No. Downs, c.	5 18 0.	4½.	3½ 4½	Oct. 1866	
4688	Great Retallack, s. l. b.	0 12 6.	1½.	—	Jan. 1866	
6000	Great South Chiverton, s. l.	2 2 0.	2½.	2½ 2½	Jan. 1866	
3000	Gr. St. Tolgus, c. Redruth.	1 9 6.	—	—	July, 1866	
6000	Gr. St. Wh. Agar, c. l.	0 19 6.	¾.	¾ 1	Aug. 1866	
3000	Great West Chiverton, l.	1 0 0.	—	—	Aug. 1866	
313	Great Wheal Badden, l.	7 17 6.	—	—	Dec. 1866	
1118	Gr. Wh. Fortune, l. Breage	27 0 0.	6	4 6	Dec. 1866	
2000	Great Wood, c. l.	100 0 0.	—	—	—	
2500	Grit and Stapeley, l.	10 0 0.	—	—	July, 1866	
02940	Gunnislake (Clitters), l.	c. 4 15 0.	—	—	Aug. 1866	
6068	Gwydyr Pk. Con. Llanrwst	1 13 0.	—	—	Nov. 1866	
6000	Hallenbeagle, c. Kenwyn	2 13 0.	—	—	Nov. 1866	
6400	Harwood, l. Durham*	0 6 0.	¾.	½ ¾	Sept. 1866	
5000	Havan, l. Cardigan*	4 15 0.	—	—	Mar. 1866	
6000	Hlozan, t. c.	0 19 6.	—	—	June, 1866	
6000	Lady Bertha, c. Tavistock	3 6 6.	—	—	July, 1866	
200	Lewwood, c. l. Lydford	3 6 6.	—	—	June, 1866	
1019	Leeds and St. Llybry, t.	19 13 4.	—	—	Mar. 1866	
963	Lelant Cons. t. Uney Lelant	35 0 0.	—	—	Mar. 1866	
160	Levant, c. l. St. Just.	10 8 1.	—	—	June, 1866	
6000	Levant United, St. Just.	0 10 0.	—	—	—	
1024	Lovel Consols, t.	—	—	3½.	3 3½	Jan. 1866
2000	Lower Park, l. Denbigh*	3 11 0.	—	—	Jan. 1866	
2000	Maes-y-Safn, l.	20 0 0.	—	—	Jan. 1866	
6000	Mandlin, c. Lostwiththiel	4 7 0.	—	—	Mar. 1866	
6000	Marillyn, l. Penryn	—	—	—	Jan. 1866	
2000	Minera Western Battery	0 2 6.	—	—	Sept. 1866	
4975	Molland, c. South Moulton	3 13 0.	—	—	Aug. 1866	
640	Mount Pleasant, l. Mold	4 0 0.	—	—	—	
1024	Nangles, l. c. Kea	25 5 0.	—	—	Oct. 1866	
4000	Nantes, l. Cardigan*	1 0 0.	—	—	Nov. 1866	
512	Nant Minera, l.	6 10 0.	—	—	Jan. 1866	
250	Nanty Mines, l. Montgom.	30 0 0.	—	—	Aug. 1866	
6000	New Clifford, c. Gwennap	2 0 0.	—	—	Mar. 1866	
4000	New Cornish [12000 £1 pd., 12000 15s. pd.]	—	—	—	Nov. 1866	
1	N. Crow Hill, c. St. Austell	3 2 0.	—	—	Sept. 1866	
4514	E. Russell, Tavistock	0 10 8.	—	—	Sept. 1866	
6400	Nether Heath, l. Dutton	1 1 0.	—	—	May, 1866	
4000	New Hendra, t. c. Breage.	14 11 0.	—	—	Mar. 1866	
6400	New Pembroke, l. c.	1 0 6.	—	—	Nov. 1866	
6000	New Tamar, s. l.	0 7 6.	—	—	Dec. 1866	
967555	New Treleigh, c. Redruth.	4 8 0.	—	—	May, 1866	
960	New Trevenen, l. Wendron	8 14 0.	—	—	May, 1866	
4000	New Wheel Lovell, t.	1 0 0.	—	—	Aug. 1866	
4000	New Wh. Seton, c. Cambn.	53 15 0.	40	32½ 37½	Dec. 1866	
5000	North Devon, s. l.	0 16 0.	—	—	July, 1866	
50000	No. Dolcoath, c. Camborne	4 0 0.	—	¾ ¾	Oct. 1866	
34587	North Downs, c. Redruth.	4 8 10.	—	—	Jan. 1866	
3000	No. Grambler, c. Redruth.	6 19 9.	—	—	Dec. 1866	
30000	N. Hallenbeck [8000 £1 pd., 8000 8s. 6d. pd.]	—	—	—	July, 1866	
9000	North Jane, t. s. l. Kenwyn	3 0 6.	¾.	¾ ¾	Sept. 1866	
9000	North Levant, l. c. St. Just	10 0 0.	—	—	Nov. 1866	
9000	Nth. Minera, l. c. Redruth	4 0 0.	—	—	Nov. 1866	
9000	Oberlinx, c. Linkinhorne	4 0 0.	—	—	May, 1866	
4000	North Pool, c. Hlozan	4 18 6.	—	—	Nov. 1866	
685	No. Roakear, c. Camborne	49 3 0.	8	7 1	Jan. 1866	
9000	No. Shepherds, l. Newlyn	6 0 0.	—	—	July, 1866	
93336	No. Tressherby, c. St. Agnes	1 9 0.	2½.	2½ 2½	—	
5000	North Wheel Bassett, c. H.	5 0 0.	—	—	April, 1866	
6610	North Wheel Crofty, c. H.	3 11 3.	5	5½ 5½	July, 1866	
21248	N. W. Robert, Smp. Spiney	4 0 0.	—	—	May, 1866	
62588	Okel Tor, c. Calstock.	4 0 0.	—	—	Aug. 1866	
4000	O. Gunnislake, c. l.	2 10 0.	—	—	Aug. 1866	
2000	Orsedd, l. Flintshire	0 8 8.	—	—	—	
4000	Par Consols, c. St. Blazey*	2 2 0.	—	—	Nov. 1866	
4000	Par and St. Blazey Cons. t. c	1 18 9.	—	—	Sept. 1866	
4465	Peab-an-drea, l. Redruth.	15 16 6.	—	—	Dec. 1866	
5000	Penden Consols, c. St. Just	5 15 0.	—	—	Oct. 1866	
2340	Penhale Wheel Vor, t. c.	3 2 0.	—	—	Jan. 1866	
5000	Penhalls, l. St. Agnes	3 0 0.	¾.	2½ 3½	July, 1866	
5000	Penhale and Penmaux, s. l.	9 10 0.	—	—	May, 1866	
2512	Penhallow Moor, s. l.	9 10 0.	—	—	Sept. 1866	
200	Penralt, s. l. Merioneth*	2 7 0.	—	—	Feb. 1866	
200	Pentre Llyan, l.	30 0 0.	—	—	May, 1866	
772	Polbreen, l. St. Agnes	15 0 0.	—	—	Nov. 1866	
512	Polbreen, t. St. Agnes	8 0 0.	—	—	Aug. 1866	
9000	Prince Arthur Consols, l.	2 0 0.	—	—	Nov. 1866	
2000	Prince of Wales, l. Calstock	0 11 6.	38s.	34s. 36s.	Nov. 1866	